```
<210> 4881
<211> 2449
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (15)...(1066)
<223> similar to gi3874290 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4881 60 cagacttgcg tetgteaccg ggteceteca ceettgtete etgtgcggce agcgtcagag ccatggcgac ggaggagaag aagcccgaga ccgaggccgc cagagcacag ccaaccctt 120 egteateege cacteagage aageetacae etgtgaagee aaactatget etaaagttea 180 cccttgctgg ccacaccaaa gcagtgtcct ccgtgaaatt cagcccgaat ggagagtggc 240 300 tggcaagttc atctgctgat aaacttatta aaatttgggg cgcgtatgat gggaaatttg 360 agaaaaccat atctggtcac aagctgggaa tatccgatgt agcctggtcg tcagattcta accttettgt ttetgeetca gatgacaaaa cettgaagat atgggaegtg agetegggea 420 480 agtgtctgaa aaccetgaag ggacacagta attatgtctt ttgctgcaac ttcaatcccc 540 agticeaacct tattgtetea ggateetttg acgaaagegt gaggatatgg gatgtgaaaa cagggaagtg cetcaagact ttgccagete acteggatee agteteggee gttcatttta 600 660 atcgtgatgg atccttgata gtttcaagta gctatgatgg tctctgtcgc atctgggaca 720 cegeeteagg ceagtgeetg aagaegetea tegatgaega eaaceeece gtgtettttg 780 tgaagttete eeegaaegge aaatacatee tggeegeeae getggaeaae aetetgaage 840 tetgggaeta eageaagggg aagtgeetga agaegtaeae tggeeacaag aatgagaaat 900 actgcatatt tgccaatttc tctgttactg gtgggaagtg gattgtgtct ggctcagagg 960 ataaccttgt ttacatctgg aaccttcaga cgaaagagat tgtacagaaa ctacaaggcc acacagatgt cgtgatctca acagettgtc acccaacaga aaacatcatc gectetgetg 1020 1080 cgctagaaaa tgacaaaaca attaaactgt ggaagagtga ctgctaagtc cctttgctcc 1140 tgcccgcgag agactgtcgg gaagttgacc cggattggca agaaacaggg tgtcttggag 1200 gtggtccccc agatetgcgc etgggggtca ggacagggcc tgatttgagc etcetetetg 1260 aagatgattt ggccgagcgg aaggtgtgga ccaccggaaa gttcttaaaa gttgctggtg acatttcttg ccaattctaa cactgtctag ggaagagttc ctagtctatt gtgttcaaac 1320 1380 agagtcaaca aaagttttta attttttatt acagaagggt gaagttcaat ttaacatgcg ttgtgttttt tcagtaaacg ttctgtatct ttttgatatt ccatgaccca gtgcacgctg 1440 1500 tggcctgtca ccgccaccgt ggccccgcca gctggcctcc cctttggccc acgccggccg 1560 cocceattot otgotgogta gatgocotgg cocagggood tgactootec attocogoda gtagetgtte ctagtgtatt ttegtettte tggaaaacag cattgagtgg ttgttttetg 1620 1680 tgtaaagage egtttgtgte ttgggagttt gtggcccaca tgccgatage acggtcateg cacatgacte tecegtttgt etcagtgtee etgcaacaag cagcacegca gactgtaata 1740 aaaggtgggg ttttgtgaat ggttgtggca agtgcgtcct tgtgaagctc gtctccatgt 1800 ggetttettg gagaaagget eeeetgggge aagagggtgg aaggtttett tggaeaggag 1860 gtgctgaggc tggctgcacc tgctctctga agacgctttc ctctctaggt tcattgttca 1920 gtgttgctgg gggcggggaa cgggggtggg gaggttctta gttgcgaagg agccaagctc 1980 2040 ctgatggact tgcgttggga tgtgggggac acctgtggca tggtaagget ccctgagtcc 2100 cttactccag gtcagatgcc agtgggactc atgcgcccta tgagggctgc agggccagtg 2160 etgeceeteg gaeteetega ggggttgggt getaagegeg ageetegeeg teeetgetgg agreetegee tgeetgeece tetgeetgtg eteetggeac tgtggettee eggtgeteae 2220 2280 etgeacagea gttaacagea gaggeegage gggageetet ggggagegag getgaaacet 2340 gaacctgccc atggagacag ttgtggtgag ggttgccaca cacagtgagg gcggagcagg 2400 gtggctgagg gcacaggtgc ttgggtctgt cccacggggc agggctttgg ggctgtgatg ctctgggaag ccagcttggg tcctgggtct acagagggcc ctggcccgg 2449

```
<210> 4882
<211> 729
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (264)...(642)
<223> similar to gi4588080 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4882 aatttctgct gttttaagct agaaaatttg tgataattag ttgcagcagc tgtaggaaac 60 120 taatacaagt atgcatttga aactaattac agattttgaa ttgctttaaa tcttagtcta cgactatett gtgtttatag ttaagagett tttaaaaaaa agtatattaa ggactgaata 180 totqtcataa aaacaatgtt atatatgtat tattccattt atcctcacaa ggttactgtt 240 ttggttttat tttacctact gcagacgtgg ctggtggcta ttcatattcc atgcttgatg 300 caatcagaag agcagtgatg gtttccaata tccttttaat taataaggta aatgagaaaa 360 420 gcctcaccct caaagaagtc ttcagactag ctactcttgg aggaagccaa gccctggggc tggatggtga gattggaaac tttgaagtgg gcaaggaatt tgatgccatc ctgatcaacc 480 540 ccaaaqcate cqactetece attgacetgt tttatgggga cttttttggt gatatttetg 600 aggetqttat ecaqaagtte etefatetag gagatgateg aaatattgaa gaggtttatg tgggcggaaa gcaggtggtt ccgttttcca gctcagtgca ttatctatac ctggggccag 660 720 attitictgca ctittgaaatg tigectitige ctaatgaaag aaacaattea ctiaccagee 729 tcctcaccc

```
<210> 4883
<211> 398
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(69)
<223> similar to gi5726285 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

	•			1	*	
<400>	4883	•		•	Ŷ	
cctggtgaac	gctgtcccag	tgcacccgat	aatggcgaag	aaaatgtgcc	tctttcagga	60
aaagtatagg	aaatgagaga	agactgtgac	aactcatgac	ctgcatcctt	aatatccagt	120
	ccccttctt					180
ctaccactgc	aaagagttgt	aaccattttc	tggtatcaca	tttatttttc	aagacatact	240

```
tttcaagaca tcattcactg acccactace tgcattgagt ataaatgcct ggatgttaag 300 gattccaatt taactttgaa aagaactgte tcattcattt acatttetgt tacagtcage 360 ccaggaggtt acagtgaget etecactaag aatetggg 398
```

```
<210> 4884
<211> 6692
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(2978)
<223> similar to gi2224607 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4884

```
gagagagtaa gttggaggga aaggcggctc aggacatcaa agatgaggag cctggagact
                                                                       60
tgggccgacc gaagcctgaa tgtgagggtt acgaccccaa cgccctgtat tgcatttgcc
                                                                      120
gccagcctca caacaacagg tttatgattt gctgtgaccg ctgtgaagaa tggtttcatg
                                                                      180
gcgattgtgt gggcatttct gaggctcgag ggaggctttt ggaaaggaat ggggaagact
                                                                      240
atatetgeec aaactgeace attetgeaag tgeaggatga gaeteattea gaaacggeag
                                                                      300
atcagcagga agctaaatgg agacctggag atgctgatgg caccgattgt acaagtatag
                                                                      360
gaacaataga gcagaagtct agcgaagacc aagggataaa gggtagaatt gagaaagctg
                                                                      420
caaatccaag tggcaagaag aaactcaaga tcttccagcc tggtcccggg cctgtcccca
                                                                      480
cccagctgcc tgtcctctgg caggtattgg aaattgctgt gtctagaagc atctctgcct
                                                                      540
tcacactctt gcactgcatt agctgcaagg tgatagaggc gcctggtgcc tcaaaatgta
                                                                      600
ttggccccgg gtgctgtcac gtggcgcagc ccgactcggt gtactgcagt aatgactgta
                                                                      660
tcctcaaaca cgccgcagcg acaatgaagt ttctaagctc aggtaaagaa cagaagccaa
                                                                      720
agectaaaga aaagatgaag atgaagecag agaageecag tetteegaaa tgeggtgete
                                                                      780
aggcaggtat taaaatctct tctgtgcaca agagaccagc tccagaaaaa aaagagacca
                                                                      840
cagtgaagaa ggcagtggtg gtccctgcgc ggagtgaagc actcgggaag gaagcagctt
                                                                      900
gtgagagcag cacgccgtcg tgggcgagcg atcacaatta caatgcagta aagccagaaa
                                                                      960
agactgctgc tccctcgccg tcactgttgt ataaatccac gaaggaagac aggaggtccg
                                                                     1020
aggagaaagc ggcagccacg gcagcctcaa agaaaacagc ccctccaggc tccacggtgg
                                                                     1080
gcaagcagcc tgcacctaga aacctcgtgc caaagaagtc ttcttttgct aatgtggcag
                                                                     1140
cagccacacc agccattaaa aagccaccct caggtttcaa gggcaccatc cccaagaggc
                                                                     1200
catggetete egetaceeca tegagtggtg etteagetge eaggeaggee ggaceggeae
                                                                     1260
ctgcagcggc gacggctgcc tccaagaagt tccctggctc cgctgctttg gtgggagccg
                                                                     1320
taaggaagcc agtggtacct tctgttccaa tggcctcgcc agccccagga cgccttgggg
                                                                     1380
ctatgagtgc tgcaccatcg cagccaaatt cacaaattcg gcaaaatatc agacgctcct
                                                                     1440
taaaagagat tttgtggaaa agagtcaatg acagcgatga cttaatcatg acagaaaacg
                                                                     1500
aagtaggaaa aattgccctc catattgaga aggagatgtt taacttgttt caagttacag
                                                                     1560
ataatcgcta caagagtaaa tatcgcagca tcatgttcaa cctgaaggac cctaaaaatc
                                                                     1620
agggactett ceategtgtt etgegtgagg aaatetettt ggegaaaett gtgagaetga
                                                                     1680
agccagaaga acttgtatet aaagagettt ecaegtggaa agagaggeea gegagatetg
                                                                     1740
tgatggagtc cagaactaaa ctgcacaatg aaagcaagaa gacggccccc aggcaggagg
                                                                     1800
ccatccccga tctggaggac tctccgccag tgtcggattc agaggaacag caagagtcag
                                                                     1860
cacgtgctgt ccctgagaag agcacagcgc cgcttctcga cgtcttcagc agcatgttga
                                                                     1920
aagacaccac cagtcagcac cgcgcacacc tettegatet caactgtaaa atttqcacaq
                                                                     1980
gccaggttcc ctccgcagaa gatgagccag ctccgaaaaa acaaaaattg tcagcttctg
                                                                     2040
```

```
2100
ttaagaaaga agacttaaaa tcaaagcatg acagetetge acetgaceca geteeggatt
                                                                     2160
cagetgatga ggtgatgeeg gaggetgtge etgaagttge etetgageea ggeetagaaa
                                                                     2220
gtgcttctca tccaaatgtg gacagaacgt atttccctgg gcctccagga gatggccatc
                                                                     2280
ccgagcctc cccgctggaa gacctgtccc cctgcccagc ctcctgtggg agcggggtgg
                                                                     2340
teaceacegt caeagtgtee ggeegggace ecaggacege teeaageagt teatgeacag
ccgtggcctc cgcagcatcc cgcccagaca gcacccacat ggtggaagcc agacaggatg
                                                                     2400
tgccgaagcc tgtcttgact tctgtgatgg tgcccaagtc catactagct aagccatcct
                                                                     2460
                                                                     2520
catctcctga cccaagatac ctgtcagttc ctccgtcacc aaatatcagc acttcagaat
caegtteece tecagaggga gacaegacee tetttttgte tegaeteage accatttgga
                                                                     2580
aaggatttat taacatgcag agtgtggcaa aatttgtcac taaggcgtat cctgtctctg
                                                                     2640
ggtgttttga ttacctcagt gaggatttgc ctgacacaat tcacattggt gggaggatcg
                                                                     2700
caccgaagac agtttgggat tatgttggca aactcaagtc ttctgtgtct aaggagctct
                                                                     2760
gtetgateeg ettecaceec gecacagagg aagaggaggt egectatate tetetetact
                                                                     2820
cctatttcag cagccgtggc cgctttggtg ttgtagctaa taacaacagg cacgtcaagg
                                                                     2880
acctetacet gatecegetg agegeeeagg accetgttee atecaaacte ttgeeetttg
                                                                     2940
agggaccagg taagcgccgg ctttctgggt ggaggtgagg cccacctgca cctgcacccc
                                                                     3000
                                                                     3060
tecteceact gacatgeeet getgagteet gaccageeea gggetetetg ggagcaggag
ttaggagcac agacgcagcg gttagcaata ggattcatct ttgagggcgt aggactgtgg
                                                                     3120
cacgagaagt acccctgatt cacagcataa attgtcttag gagagttttt tagagaggga
                                                                     3180
aaaacccaca gcctgcaacc agctcatctt ggcctcaggt cagagaagac tcagtgccca
                                                                     3240
ggageccaag geteagecag aaagggaggt gacacteeca geggeeetge tettteetet
                                                                     3300
agacagactc gggagccagc acacaceggg aagtggctcc atcagggatc acttctctaa
                                                                     3360
cagggatgga tttccaggag acttaacaat aatgacatag aaaactattt ctagaaataa
                                                                     3420
ttattttaaa atctgcagct caaattgtaa tagttcattc atctttggca agctattttg
                                                                     3480
tgtttgcacg ttccttggaa agtactgtat ttaaacgatt atttacaaat agcctaaaat
                                                                     3540
acatetttgt caagggttga gggtgattee aggggecaeg tgetetgtta gtgaceaget
                                                                     3600
ctttcatagc cccttagaag aagctgatgt gacttcagtt aggggttagt atctgatgcc
                                                                     3660
caactgaagt gtctccgtgg ccatgcagtc cccagaggat tggtgttctc tcaaagcggg
                                                                     3720
tgtgtggatc acacagtgtc ctctaaagtg cttcgtcata aaggcaggtg ctgtctggac
                                                                     3780
cetgtgcetc agtgccetct gtccctgtca ccaggcetcg gegggtgttc ctgccatage
                                                                     3840
tgtgcagggt gttcccaccc acaccctca tgccgcaccc tagctagctg gggtcctgta
                                                                     3900
ggggccactc cacatettgg gegggaette tgtegeeeca ggcaeageec acqttectae
                                                                     3960
tggagcccat tcttcacagc tggagtgggc tcagcctatg cctgtgttgt ggaattatat
                                                                     4020
gtccataaag ggattggttg gtatcagtaa tttcagggtt aaatatttgc tggcgtagtg
                                                                     4080
cattaaatta ttttagtgcc agataaattt ttaaaagcaa agtgctttag tgtgtcccct
                                                                     4140
caaatcctac ttgggataaa gagatgccac ctaatgggtg gcagaaagga ccctggtaga
                                                                     4200
ggttettggt gttgettgtg aagagetetg geeageteca egtgaeeagg gagaggaaaa
                                                                     4260
gcccggccct cctggaggtg aagaccgaga agctggcctc tccgcacctg tgaagaccca
                                                                     4320
ctggtcagtt gcaagtgcga cagtgtgtgc actcagtgca gacactgcag cacctcagca
                                                                     4380
cetecetace ggggtggaaa gagcaetttt tetttacaga aacatgatte ttagatageg
                                                                     4440
agecteeet ttttaaaaca attgaagega tattteatee tttettgage tteteteeet
                                                                     4500
geteatetee aaaettggag etgteaggtg ageacaggtt gtagggtgtt gagegageee
                                                                     4560
eggegeatge egggeacegg gtteeceaca etgggeagtg aeggggeeca gggaggeeae
                                                                     4620
cagaggageg gegeeteeat teteceeaca geaagggetg getgtgeagg tgeageeeeg
                                                                     4680
gggcagaggg aaaggacagg tctcccagca cctcccggat ggcaccggga caaggagggc
                                                                     4740
tgggctgggg tcactcacct tgtctgctga gtgcgatggc accaaccacc cacactgtca
                                                                     4800
getecgegae cagetggggg aacgtèacae tegeccaeca aggeaettge tgaggecaeg
                                                                     4860
acgccgcctg acggggacac acaaaagccc cagggacttt gatccacgat aaagagcaga
                                                                     4920
ggcgtctggg taaagtaaca cagggcaagg gactttagaa aagtaacagc tagtgaaacc
                                                                     4980
tttccataca cttcagaaat gttttaactt aagacttcag tataatgtta acttctcctg
                                                                     5040
atgicetigi igacatgaat gegigigegi gaaateteae acaetteeai ggicaetaaa
                                                                     5100
cageetteae eeegggeeag gecategggt acteggeeeg etteaegtae tgattaettg
                                                                     5160
acttggcgtt ttctagatat aaacatgtac atgtgtgtcc tggctttgtg gtgtaaatgt
                                                                     5220
gtagtgcgtg tgcatgtgcg cgcgtgtgtg tgtgtaaggc taggtcctgg cacgtttccc
                                                                     5280
ctgtctcagc ggaccctgtc ctcacggaga tagcccagaa gcccttggac agcacaggcc
                                                                     5340
acacctgagg gtgctgatgg tggtgactcc acagagctgt ggtcaggggt gagcatgtgc
                                                                     5400
tgcgcagett ggagtcacge ecceagaagt getgggtgag ggtetgcagg acceagetee
                                                                     5460
```

```
attocacago otcagttoto tgoggoacat goagoacagg cotgaaggag acotggogoo
                                                                     5520
ccagcettga getgeeegte tgcatcaggg cactgatgtg ggageatett cccctgggga
                                                                     5580
                                                                     5640
tgttaaggag aaggtcctgt tgggggtaga gattcacgca gaaaagagtg actgactcgt
ccgtgtgcct cagtttatac cacacaattg caggtgtcca tgcctcccac acatggggac
                                                                     5700
ctagtgggtt ttgacagcgt ggtgtccagt cctagccccc tcagtgcttg ctgttcacac
                                                                     5760
ttaagcaagt gaaggcctga aggtgcccag ctgtgccctc aggggaaact taagtcaccc
                                                                     5820
                                                                     5880
gecetyteag caettygeee ttytegggea gtgaqagtyg agetyeeee geageaceet
                                                                     5940
caggagecat geagtteaca geagtagetg gateteeetg aggaeatttg teettgeata
tettaatgat ttgtccacag aaacaceggg ttgtetteet etgeceetet geeeegeagt
                                                                     6000
gggggcacte tetgtaacte ageateacag tggggggcag etgggaggee tggtteeagg
                                                                     6060
tgaccttete cacctagatg ttcaccecae teagttecag etttaccaae agggeeceee
                                                                     6120
geaggaactt ggggtegeag agteeeggee tgteteaggg eettgtteat ggaagggaga
                                                                     6180
tgagtcaggt tgaaagctca tcgtgtaggg ttctgtgcgg ggcccttaca ggactggacc
                                                                     6240
gcagccaaga tgcctgcctg ttaaccatgc ccagcccccg tcatttccgc gtgaagccgc
                                                                     6300
aggeetegga geettggtet gaaatgeetg tggagtaace teggteeata aacatgggtg
                                                                     6360
cacagtetgt tetececaag tacagggeag gaggaaacac egecetetgt agetgetega
                                                                     6420
atggaaaggg ctcttttctc tgaggtcttt atacattaga aagctcttct gggaagaatg
                                                                     6480
tttgaatcca tagtgtcttt ctgtattcac ttttaattgc tttctaaàtt agctgagaaa
                                                                     6540
ttctgacttg aaatattgtc aggtaagcat ttcttcagtt ttcatgtgtg tatgtaacag
                                                                     6600
tagetttgca tggaaattgt aatcagagte aaatacagta ttgaatggaa tgtactgeet
                                                                     6660
tetectecta aateaataaa eatettteat gg
                                                                     6692
```

```
<210> 4885
<211> 684
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(215)
<223> similar to gi1052737 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4885
atatatgaga actggggcga atgatgtgaa acgccatcgg tggttccgct ctgtggactg
                                                                       60
gaaagctgtt cctcagagaa aactgaagcc tcccatcgtg cccaagatag cccgcgaagg
                                                                      120
cgacacetec aactteggaa ettaceeega gaatgaetgg gacacageeg egacegtgee
                                                                      180
gcagaagggt ttagaaatct tcaagaattt ctgaggacag gagctcacat ctggaagaag
                                                                      240
caggaagget ggaatetgee tgeaacaaag agetgeteet gageagacea gtageaatgt
                                                                      300
ettetteaeg tgataaggae attteeaett ttetgtettt gtgeetgtat gtatagaaae
                                                                      360
agatcagagc acagttgaaa ttaatgtaac tggcattatt taagcaactg gaattccaca
                                                                      420
ctgtaggaag gttttgaaaa ttgtttgctt gtagatttta tcttatcctt tagtgttgtg
                                                                      480
ttcctactgt gatgtcttgg tttttctcat agacttaagt ttataagtta tgaactcgac
                                                                      540
ttgttcaatt ataaccacaa attgtgtgtg tgtgtgtgtg tgtgtgtgca tgcgcgcgcc
                                                                      600
tgtgtgtata tatagaagtc attatggcag atccacagaa attgtgcaat gatgtaaatg
                                                                      660
ttcatacttc acagagectg tatt
                                                                      684
```

```
<210> 4886
<211> 1893
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(893)
<223> similar to gi6010480 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4886
caagaatggc agcacaggcc cccacttaga taagaagaag gtccagcaac tccctgacca
                                                                       60
ttttggacca gecegtgeet etgtggtgtt geageagget gtëcaggeet gtategaetg
                                                                      120
tgcttatcac cagaaaaccg tcttcagctt cctcaagcaa ggccatggtg gtgaggttat
                                                                      180
ctcagccgtg tttgaccggg aacagcatac cctcaacctc ccagcagtca acagcatcac
                                                                      240
ctacgtcctc cgcttcctgg agaaactctg ccacaacctt cgtagtgaca atctgtttgg
                                                                      300
caaccagece tttacacaga etcaettgte acteaetgee atagagtaca gecacageca
                                                                      360
egacaggtac ctaccaggtg aaacetttgt cetggggaat, aqtetgqeec qeteettqqa
                                                                      420
accacactca gactcaatgg actctgcctc aaatcccacc aaccttgtca gcacctccca
                                                                      480
aaggcaccgg cccttgcttt catcctgtgg cctcccacca agcactgcct cagctgtgcg
                                                                      540
caggetatge tecaggggag tgttaaaagg atcaaatgaa agaagggata tggaatcatt
                                                                      600
ttggaaacta aatcgttccc cagggtcgga ccgatacctg gagagccgcg atgcctctcg
                                                                      660
actgagtggc cgggacccct cctcatggac agtcgaggat gtgatgcagt ttgtccggga
                                                                      720
agetgateet cagettggae eccaegetga cetgtttege aaacaegaga tegatggeaa
                                                                      780
ggccctgctg ctgctgcgca gtgacatgat gatgaagtac atgggcctga agctggggcc
                                                                      840<sup>´</sup>
tgcactcaag ctctcctacc acattgaccg gctgaagcag ggcaagttct gaaccaggag
                                                                      900
aggcagceta gacaaccaag tggcagcagg tgggggcatt ctfctaggaa tgaggggcat
                                                                      960
cageceacee caggeacete agtggggtte egggecacet caggaeteca agaggetgtg
                                                                     1020
tggagccacc actcctagcc acagctgcca tgataagtcc ttccatgaag gactgaggag
                                                                     1080
ggagagtggg ggtccagggc tggtgctgct cttccctcag ctctgccggg qctctaaqqt
                                                                     1140
ccctctattt atttctcaac cctggctggc ctctcaccag gagtttaggc tgaatgcctt
                                                                     1200
ccacgtgatg gaggaaaagg ccaactctgt cctggtcttg ctgtggcacc ccatcgcccc
                                                                     1260
acagetegta cetteteace agatteecet gaateeaaac tegtggtgea aacetetace
                                                                     1320
ttttttacaa aaagatetta ttgttaattt attgtttetg geaettggge aaaceetgta
                                                                     1380
gttaatactc ctcccacact agacactggg tttcaggagg agggagactg ccctgctttq
                                                                     1440
gtcccagaga ggccctctgc agataggcgt ggcccctctt cagaggacac taccctaggg
                                                                     1500
cactttetet ttgaggtgga gagacccata aageettgae cacateaete catatgggga
                                                                     1560
ggagaaggat coetgteace tteteetete tteaegggge cettttgeag ceetaggeet
                                                                     1620
catctgtggg aagggagtcc ctggcttata ctgccccac cacagctcct tgccctggcc
                                                                     1680
agaactgctg tcgaagaaaa tcaggccgga aggccaagaa ggcgctaagg gggatgggag
                                                                     1740
ggcaggtttt ccaggctgga gtcggttcca cccactcgcc tgtccacagg cttccttqta
                                                                     1800
agcaagtcag cagcacagct actcacgctg ccatctggac ttattttatg tcaatctgtt
                                                                     1860
tataaataaa aaccaatata gataaaaaaa aaa
                                                                     1893
```

```
<210> 4887
<211> 1319
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(1320)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (231)...(437)
<223> similar to gi549986 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4887
ataaaatatt agggactttt cttggtagag atggaaatcc aaataaacgg aatgtgcaca
                                                                       60
atgaaacatc tatgcatttg ttgtgtatgg gacctcaaat tatgatatct gaaggagccc
                                                                      120
ttcatcctcg cttggcacgc cccacagaag atgatttcag aagagcagat tgtctgcaga
                                                                      180
tggtcttaaa atggaaagga gcaaaacttg accagggtga atatgagaga gcagctattg
                                                                      240
atgetgttga taacaaaaaa aacacceet tgeactatge tgetgeetea gggatgaaag
                                                                      300
cctgtgtaga gcttttagta aaacatggag gagacttgtt tgctgagaat gaaaataaag
                                                                      360
atactectig tgattgtget gaaaagcaac accacaaaga tttggeecte aatetggaat
                                                                      420
ctcaaatggt attctcacgg gatcccgagg ctgaagaaat agaagctgaa tatgctgcat
                                                                      480
tagacaaacg agagccatat gaaggattaa ggcctcagga tcttcgtaga ctaaaagata
                                                                      540
tgettattgt ggaaactgca gacatgette aggeteetet etttactget gaagetttac
                                                                      600
ttegagetea tgaetgggae agggagaaat taettgaage ttggatgtee aacceggaga
                                                                      660
actgctgcca acgatcaggt gttcaaatgc caactccacc accaaqtqqq tataatqcct
                                                                      720
gggacacget cecateteca agaactecaa ggactacacg etettetgte aceteeccag
                                                                      780
atgaaatcag cttatctcct ggggatttag acaccagttt gtgtgacatt tgtatgtgca
                                                                      840
gtatetetgt atttgaagae eetgtggata tgeeetgtgg acatgaettt tgtagaggat
                                                                      900
gttgggagte gtgagtatat gageacetta geatetetta etgeatgata geactetgat
                                                                      960
ttgttaataa aattgtttgc tttcagtatt taatgatgca aattgtttat attgacttct
                                                                     1020
gagttacaca gaaatgaatt tagactttac tagtaaggaa aaatattttt qtttttattt
                                                                     1080
ttacgtette eccagetatt ttaattaatg etatttaget taatgtaagg tacetttaga
                                                                     1140
aacaaagcag gtatacaaat aatttttctt agtattttag tttatattac atctaatgta
                                                                     1200
aatttcaggo aagaatcagt ttgtcttata tcccaggaat cttaagcatt tggttntgtg
                                                                     1260
ctgtctcaat tttttgtgac aaccaaattg ccttgaaaat ctttaaqaat ataqatqtt
                                                                     1319
```

```
<210> 4888
<211> 1586
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1333)...(488)
<223> similar to gi726395 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4888
tttttttttg gtggttctca aactgtgttc ctagaagcat cccatgtgcc cccaggccaa
                                                                       60
                                                                      120
gaggtccagg ttctaccccg acccacatcc cctgaatcag agcagetttt ttttttttt
aaaaattttg atctgtttca cacattatat ttgtttgaac ttcccatgtt taaaaatttt
                                                                      180
gaagaaaatc cctggagtag acaatcccta gagcactgac atgctgtggt ccaaggttca
                                                                      240
ccaggaacag tgcctgtgcc ctgccacatg gcggggttcc ttcaagcctc tggtgatgaa
                                                                      300
ggtgctcagg gaaaggagga cggaggggcg cggaaggacc cagccactgc tggccaccct
                                                                      360
ggcctctgct ctgtgttcac gggggagcag actctgggga ggcgcccctc ctcaccacgg
                                                                      420
                                                                      480
cctgcaggcc gggctggagc ctgcgccttc aggggccttg catctccagc tggaccccct
ggcacaggat gtgctgcagt agcccgttga ccacatccag agtctcgtcc ttctccagca
                                                                      540
cgatgtcata ggagtccatg tagcgctccc gccgctcctc caccttgtca ttcaggaagc
                                                                      600
                                                                      660
caattttgag aatgttctgc acaccaggaa ccccatcggc catggtgagg tccccgatag
                                                                      720
agteteceag caggatgaca ttggttttge ceteaagttg etggaagtaa eeacagttet
                                                                      780
cacacgcaga gctgttcttg ttgtatgtgt gtatgagctg gcccttaaat ccctggagaa
                                                                      840
aaccatcttc attaaaatcc atgtagttag acacgatgtg gatgttgggg tggaacactt
teatetgteg gataatttet teeaggatat caccaatgee egeagaaaag atgaaaaggg
                                                                      900
gaatgttgtt atggtagagt gtgttgaaga aggtcttata tccctccctg agcattgcat
                                                                      960
tggactetet aaccacetgg getatetgaa acttetgaat ettetgetga cataggagat
                                                                     1020
tgtgcgcttt ggtccaccat tccaccatat gaggtagett ctccttgacg gtccggtgtg
                                                                     1080
ggtcgatctc aattgggtaa tagtggtgaa ggagcgctgt gagctctttc cgacactcct
                                                                     1140
cactgatgat cttgctatta tccagaatat tgtaagaaga agggcatcgc tttccattat
                                                                     1200
atgcaaacct gctcaaggtc atgtcaaaat cagaaatcac ctgtaaccgg tctccgccgc
                                                                     1260
cettgeggag ggegeecaeg ateteetgea eeegeecagg etgeegeate aggaeegtgg
                                                                     1320
cetteateag ggtgeteace tgteeegaga eeegagagaa ceaetgaace etgegeeacg
                                                                     1380
ctgggcccga ggggagcccg gggctcgctc gggcgcgcgt gtgaggcggg gccggggtgc
                                                                     1440
gegaggggge ggetactgge etgggtgaag eggeggtgee teggtgaeea getgggggge
                                                                     1500
tegaagegee cegggggteg gagteeggge cegeceact ceggacgett ceteceteet
                                                                     1560
cacctccaca accatcccgt tcgagg
                                                                     1586
```

```
<210> 4889
<211> 5241
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5242)...(889)
<223> similar to gi2224553 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4889
tettaattet aeteeggaaa gaaaaatttt taacageeag ggaattgggg ttggttttee
                                                               60
ecetttteee ettaaaaatt tttttttee eeaaaageet taaattttgg aggggggtg
                                                              120
ggcccataag tcccccccc aaaaaaaagg ttcttttcca aaaatcccaa ggagggtttt
                                                              180
aaatggcccc ccataaagaa aaaaatttta ccttgccaac cccgggtaaa attgggcccc
                                                              240
300
tegeteattg eggetteteg geacagtaag aaatattgea catgateaac atgttttgtt
                                                              360
ctggggaagg gggcaagggc agggggaatc accttcttag aaagtacaac ccaagttggg
                                                              420
agggcagagg gggtgaggag aaaaccctcc ccgtgcctgt ggcaaagtgc aggagccccc
                                                              480
acceccaaac taacetgagt ceageceete tggggaaaaa aggggtgeat gaacteeece
                                                              540
```

```
600
tattccacag gcgcctccct gtggcccaag gcctgcacca ccctccagct tgcagccctc
acaggagcca ttttgcataa agtgaaaagc tctgaaggtc acacgctcca ggttatgtac
                                                                     660
aggggettgg aggaggaga etgeceetge ageceeteag etgeceecea geacegggag
                                                                     720
ggagettega gggaaggggg tatttacaag aggageagge eteatteege eecaaactgg
                                                                     780
                                                                     840
agaggacgaa atggctttac ccgggaggag ataaccttcc tgcccccaca tactgtccat
                                                                     900
gtcctgaggg ggtactataa gtcctggcat cttctcaggg gtccctcacc tgcctgtggc
                                                                     960
agetgtggag ggacetgggg gtgggggga gggetgggga geceeteee ageeaggetg
                                                                    1020
tecaggeece gactetgggg gtggaggeag tggeggggea geetgggeeg tgeeagagte
cgagctgggt gaggtggggt cagggccccc tgcggggctg ggagtggggg caggggcagc
                                                                    1080
ageggtgeca gtggggggg gtacagggag aggageetca getecagggg getgeteegt
                                                                    1140
                                                                    1200
gggagtggca gcctgcatga tcttctggcg cacctcacgg atcttcaact gcagacaaac
cttggaggga aagatgtctg catageggge ctggaaggeg getgtggeet gggetgaegg
                                                                    1260
gaagaagcca tggtcctgaa agagctgcat gaccagggcc cggcgctggt ccagggtgcg
                                                                    1320
                                                                    1380
ccgcagggag gagtatggca ccttgtcata ctctagctcc ccaagcacgt cctcggcttc
tgtacctgta cagtcaaagg tgaagatgtc cccctcgcac ttggcactct tgggggtgtt
                                                                    1440
gggctccgag ctgcagctgg agcgtcttct catcttgcgc ttgggcgagg tggggtcctc
                                                                    1500
gggtgctgaa tccaggtccg tggagttctt cctcttcttg cggtaagagc ccaggatggc
                                                                    1560
ceggggtgag gtggccagag actgcagggt gggggagggc agcactcct caggcegaaa
                                                                    1620
ctcaggcaac tcagcaaagc gctcttcgaa gtccacttct gacaggaccc tgttgtccac
                                                                    1680
agagtcaaag gtcttcttca ggggcggggg ccgcaccttc accttcttgc cagtaccagc
                                                                    1740
egecteettg egeteegggg tgteeeegge tgeeegeeea etgetgetet egetgetgee
                                                                    1800
accagggget acagetggag etggggeegg getgggagga gtggggagget eeccaegatt
                                                                    1860
etccaggece tgeecaggga egegecagte tgaagatgag etggggaatt tgetggecat
                                                                    1920
ggtctcaggg cccttggcgc tggtccgctc ctcagcaggt gggggcagtg gggggctgct
                                                                    1980
eegggeegtg ggagteeagg tetetggeag gggtggaggg getggtggtg tgggetgeee
                                                                    2040
etcaagetca gaetetgggg cagttggete teggaetggg ceaggeteea gaggetgeeg
                                                                    2100
gggtgcaggg ccaggccgcc cagaggcacc tgcctcaaag gaccccacgg gaatgctggc
                                                                    2160
gatggctgcc ttcactttct ggggggcctt cgggctgggc cgctgggcct tgggggccac
                                                                    2220
taagetgtag gteatggaae etgetgtgge getggggaaa gggetagteg gggetggggt
                                                                    2280
ggcagtggca ggggctggcg ggcccttggg cagaatggtg gctgcaggtg gggttgtgct
                                                                    2340
ggtggccaca gtgtagacca ggcttggggg ggcctgggat ggctgggcca ggggtgctga
                                                                    2400
ggaggtgggt gcagggctgc cagagtaaaa tgctgttatg acaggacctc cgggggctgc
                                                                    2460
acaggcaggc ggcagctggg gactgggcac aggtgacacg cccacctgac cgggagccag
                                                                    2520
cagtggggct tggcctgctg agagcagggg ctgcacgaag gcggggccgc tgggccccag
                                                                    2580
cgaggtgaag cctagagcta cagagctcgt gggcccgtac gaggtgactg ttccagcctg
                                                                    2640
getggaegea gggetggtae ceaggggeag egegtgeeeg eeegetgaet geacataggt
                                                                    2700
gattetggtg gaggagggca acaggacett etgaggetga gaggtgggte cagggagtgt
                                                                    2760
ggctgggccc aggggcggca ccaggccgct gggtgtgctc acaggcaccg gggtcagctg
                                                                    2820
gatgatettg etgggggget gggcaccatt etgcacaggt actgagaagg gegggeteae
                                                                    2880
cagtggcagt ggctggccgg cccctccacc ccgcactgac atgctagggg cggccagagg
                                                                    2940
cactaggace tteccaggea geagetggge tgagecacee gggggegggg cetgeaeggg
                                                                    3000
agaaactgac tgggctttgg ggggtggggc ggagggtaca gactgcagga tggggatgcc
                                                                    3060
aggagtgggt gcagtggcag ccaggacttt gccgttggtg gaagtgcccg gtgggagggt
                                                                    3120
gaaacggatg ctggtggtgg gtgcagggcc gctgggagcc gctgccttgg tcccaqgggc
                                                                    3180
3240
ctgggtgatt cccccagcct tgcccagggc acctggttgc aggatgccca ggggtactgg
                                                                    3300
cccattgggg ccactcccag cacctgctcc tgagcccgca gtggtcccac caccaggggc
                                                                    3360
cccctgggca atgaactgga cagcaggggg cgcaggggcc ccataccccg gggtgcccac
                                                                    3420
cagtaggtta gtgacagtgg caggcgcctt ccccacagtg cccagcaggg gtccagccac
                                                                    3480
caagtgtggg gctggtgagg tggctgctgc cgacttcttg tccgaataca ctaagctgac
                                                                    3540
acccageggg gageececag geaceegaga eccagtgeec attteagtee tggeacetge
                                                                    3600
tgtgtcattt ggagacgcct cagcccggcc agaggtgggg aagggcttag aggcgatggg
                                                                    3660
cacaggagtg ctgctgacag gccgcaccac attggtgacc atggtggcgg caggacggga
                                                                    3720
caggggaget getggggee cataggeeag tgatggggeg ggggeggagg geactetgge
                                                                    3780
tecgcegece tettgeteet cettgtttgg gggcageace agtgtetgca ggatgtttee
                                                                    3840
tecteegetg ggaggggeeg egatgaetga ggggeetggt ggeteeagge cacceacaet
                                                                    3900
ttcgggtctc ttgcgccgga aggtggcagg atccattggg aggaaccggg ttgccttgga
                                                                    3960
```

```
aggtgtcgct ggacccccag ccccaggggg tgggggccgt agggggcccg ctgtgctgcc
                                                                     4020
                                                                     4080
ctgaccagac tcctgggcct tgaaggttcc tgagcccagt gagaaggagg tggctgccga
                                                                     4140
qqctqaqqaq qaagcaggcg aggacgcaga ggaggatggg gcggaaccat agcctttgcc
                                                                     4200
aaaggctaca ggaggateeg ggggeeetgg gggeteaggg teeagtgggg ggeggeagtg
                                                                     4260
ggtaaaggag gaacggatca caggtgaaaa ccccttccga ccaaagccct tgttgccctt
                                                                     4320
tgggteetee ceagagetgt ceceaetete getgteggte accegeteet tgeaettgag
atcaatgtca gtggtgccga agccattgtc agcaatgaca tcatcatccc cttcctcctc
                                                                     4380
                                                                     4440
acagatgace atgegeteet cateactegt catgteetea etggeegeae getgagaaeg
agaagetegg gtgggcagea gegggggeeg eccagtggee geeaaggeae etceeteace
                                                                     4500
                                                                     4560
aggggctgca aagggtcctg gagctccata ctgggtagaa ggctttgggc cagagtacga
tgcagggcca gacaccatct gcgtcagttc ctgtagcgcc tgactgtcta cttctccgcc
                                                                     4620
gtccaggctg tgtaccccgc tgtgggagaa agctcggggc cgggctgagc caggtccccc
                                                                     4680
                                                                     4740
aactgtgtgt agccgttctg ccccacagga gctgctcccc ggagccttgg tgtctgagct
                                                                     4800
caggagtgtc tgggctgcaa cggacaggag ctcagaggac accccagggg cagcagcagt
                                                                     4860
geoegtetee gacatgetee geteeegegt eteettgtge eeteetgeea geeceagget
cgtgggcttg gcctctgagc tggacttctt tcggtccttg ttgcaccact tccaatctgg
                                                                     4920
                                                                     4980
gtgggccttg aagtgggcct ccttcacctg gaaggccagg tcgtggtact tttgcttctc
cttgggcccc agggcatacc accactcgcc caggatcttg ctgacggtcc ggttgtcctg
                                                                     5040
gttgggatga cgctggtgga ccagggcccg gtgccgcttg ctgaagatca tgaaggcatt
                                                                     5100
catgggccgc cggatgtggt ccttctcccg cttgttgggg ctgcgtccat ccttctcaga
                                                                     5160
agatgagtcc cgttccttgg gtagggcact gagggactgg gtccgacgtt ttccgggcgg
                                                                     5220
                                                                     5241
tagaggcaac tggatctcag g
```

```
<210> 4890
<211> 395
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(396)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3)...(83)
<223> similar to gi164386 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
    <400> 4890

tcatgtctat gattgaccct ccccgggctg ctgtgccaga tgctgtgggc aagtgccgaa 60
gcgcaggcat caaggtactg gcctcccatc ctcccctca ttctagcctc ccccatgcca 120
gagttcaagg agctgcagtg gctgctgccc tggaaaggcc caggccacgg nggcctcctt 180
cccactgact caaagaagaa gctgtccatc tgcaaggaaa ggcccacccc tgccttgggg 240
cactcaccct tatccctttt gctcagagag gccagtgtcc catgccctc ctctccctcc 300
ctggcacagc tctttgtccc atctgcatgt gtacccttcc attctgatt gaagcataat 360
ctggcactcc tatcttgaag acctagttgt cctaa 395
```

```
<210> 4891
<211> 744
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(596)
<223> similar to gi219867 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400>	4891		*			
catcctggga	acagtgtatc	ttttgctgga	gaaccatctc	tgcgtgcaag	agacggccgt	60
		tggagtcggc				120
		gcatcatctt				180
		ccagacaggc				240
		tcacatgcta				300
		gtgcctgcga				360
		acagcatgct				420
		acaagctcaa				480
		cggaagagat				540`
		tccaaagcca				600
		gaccaacaac				660
taactcotoc	taaggggtcg	ggggctttga	aaatgccacc	ccctttctt	attgcaagac	720
	acatgaactg			,		744

```
<210> 4892
<211> 1790
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (50)...(238)
<223> similar to gi4884190 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
c400> 4892

gcgtcgacat tgaggaattc atggtaactt ctgaaaattt aaccgaagaa taaaattaag 60

agcctcaaaa tcagtttcca atggaacagc taagcctgcc acttctgaga actttgatga

agatttgaag tgggtagaag aaaatattcc ctcttcattc acagatgtag ctcttccagt

gttagtggat tcagatgagg aaatcatgac cagatctgaa atggctgaaa aaatgttctc

ttcagaaaag ataatgtgat tggaacccgt ataagaaatg tagttaagcc tgaaggacta

tccttcatca agactgaaag tgagctttga tttgatattg cctaaaaatt tttattgtgt

tatcttggaa gtctgtgtat caaaatgaag aattcagatg gtaggaggtt ctatagtcct

420
```

```
tttaaagctg actcttgagt gtcagttgaa tatccattaa attggatttg gaaataacct
                                                                      480
gaggaaagta ttatgataaa gatctgcaca gatgcctctt agctgatagg tgggcaggcc
                                                                      540
tgtgggtttg gggttctccc tcttttctct ggaacatatg acaattccag attaaagaaa
                                                                      600 -
aatgtttttt aataaatacc cttggtcttt cttctagtca cctttgaggt agatattgtg
                                                                      660
                                                                      720
attttctgga gtatagtata tccgtgtctc tgtgtcttag gtttactaga tgcaataata
                                                                      780
cttctctttg acatttgtac tgaagtgatt tgatattaag ttaaacagtt aatgtttgaa
tattggcata tttataggtt ttttccgctc cccccaacc cacccgtttt taaaaaaatct
                                                                      840
                                                                      900
atacaaagcc cttgtttgag tctcatcatg cacatcaaat catggagtta ggtcttctct
gageteaggg gaacacaagt geacagagag agatgtettg agggteacta ceaaagaatt
                                                                      960
acceteatty teceteacte aggeeatgty tacatgegat getgetgagt gtgctggggg
                                                                     1020
tgggtggtgg ccacgtggct cccccagagc acttcctaac tggcaagctg ggagacccat
                                                                     1080
tactggtgaa ctttgtggaa attagaactg tatcttttac ataatcttgg catattacat
                                                                     1140
ttcataataa aaacatacat ttagttgcat gctacatcac tattgatttt ataattaatt
                                                                     1200
tettaagett caaccatgtt ttatacetta tttegttaca teatatatgt gtaatgtgta
                                                                     1260
atatggaaat cittiggcit taatgiccit tittiaaaat giagaatgit ciaaactiga
                                                                     1320
aaggcaattg aatgtagtat gatgaaaatg tgaatgtttt gctgctttca tgaccaaaga
                                                                     1380
tacagggcta gtggacattt agaataataa ttaaagctag agtcttgtat gtcttttctt
                                                                     1440
tgaaggagtt ctaaccttgt aaattgagaa tgacttcaga gaattttgat taagaaaaca
                                                                     1500
ttaaaatctt aaccggcaca aacactccaa ttttttttca ctgtggaagc cgcaagcaat
                                                                     1560·
tttttttttc tttttctttc aaaagcctgc cttctgaatt tatttcttgt ttactcattt
                                                                     1620
                                                                     1680
cagagagggt agtaaagaag atctatttct ggtagtcata tcgcttgaaa ggtattggta
                                                                     1740
aaggggttgg cgagtcgtga ccatgtggaa agggaacagt gttggcagag attggggaga
                                                                     1790
aaatcaggcg tgtcagggtg cccttgctgt gggatatcct tcctagggag
```

```
<210> 4893
<211> 11
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(145)
<223> similar to gi3916257 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4893 gaaaaaaaaa a

11

```
<210> 4894
<211> 439
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(339)
```

<223> similar to gi306785 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 4894
agtcaatget gtcagttttt teecaaatgg atatgeette gecaetgget etgatgatge
                                                                       60
cacttgccgg ctctttgacc ttcgtgcaga tcaagagtta ttattgtatt ctcatgacaa
                                                                      120
tatcatctgt ggaatcactt ctgtagcctt ctcaaaaagt gggcgtctct tgttggctgg
                                                                      180
                                                                      240
ttacqatqac tttaattgta atgtatggga cacgctaaaa ggagatcgtg caggtgtcct
                                                                      300
tgctggtcat gacaaccgtg tgagctgctt aggtgtaact gatgatggca tggctgtggc
aacaggetet tgggacagtt ttettagaat etggaattaa eagtgteeat acatatttgt
                                                                      360
                                                                      420
tctccattga tatatctgga gaaatcaatg ctacagccta tagctgtgaa aaaattctac
                                                                      439
cttatatttg caggtgaag
```

```
<211> 2111
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2112)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (7)...(888)
<223> similar to gi488196 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<210> 4895.

```
<400> 4895
                                                                       60
cgagtagtga atcgcatgag ccgtttccag aaaagtgctg gactggaaga gattgaacaa
gaactgacgt ctaagcaagg aggtcgctgt agccctgttc cagggctatc aagcagccct
                                                                      120
                                                                      180
tetgggteae cettgeatgg gaaactgaae agccaagaet cetataacaa ttttaccaae
aacaaccetg geaacceteg geteteteet etteccaget tgatggtagt gatgeetett
                                                                      240
                                                                      300
gcacaaatca agcagccaat gacattgggg accatcacca aacgaaccgg caaagttaaa
                                                                      360
cctcctccac aaatttcacc cagcaaatcg atgggcggag aattttgtgt ggctgctatc
tteggaacat ecaggicatg gittgeaaat aatgeaggic igaaaagaga aaaagateag
                                                                      420
                                                                      480
tccaaacaaq ttqtaqttqa qtccctqtac attatcaqtt qctatgqcac cttaqtqqaa
cacatgatgg agccgcgacc cctcagcact gcacccaaga ttagtgacga cacaccactg
                                                                      540
gaaatgatga catcgcctcg agccagctgg actctggtta gaacccctca atggaatgaa
                                                                      600
                                                                      660
ttgcagccac cgtttaatgc aaaccaccct ctgctcctcg ctgcagatgc agtacagtat
tateagttee tgettgetgg cetggtteee cetggaagte etgggeeeat taetegaeat
                                                                      720
gggtcttacg acagtttagc ttctgaccat agtggacagg aagatgaaga atggctttcc
                                                                      780
caggttgaaa ttgtaacaca cactggaccc catagacgtc tgtggatggg tccacagttc
                                                                      840
cagttcaaaa ccatccatcc ctcaggccaa accacagtta tctcatccag ttcatctgtg
                                                                      900
ttgcagtete atggteegag tgacaegeea cageetettt tggattttga tacagatgat
                                                                      960
ettgatetea acagteteag gatecageea gteegetetg acceegteag catgecaggg
```

```
1080
tcatcccgtc cagtctctga tcgaagggga gtttccacag tgattgatgc tgcctcaggt
                                                                                                                                                                              1140
acctttgaca ggagcgtgac cctgctggag gtgtgcggga gctggcctga gggcttcggg
                                                                                                                                                                              1200
ctgcggcaca tgtcctccat ggagcacacg gaggagggcc tccgggagcg acttgccgac
                                                                                                                                                                              1260
gccatggccg agtcacatnt agccgggacg tcgtgggatc cggaacagaa cttcagcgag
                                                                                                                                                                              1320
agggaagcat cgagactctg agtaacagct caggctccac cagcggcagc ataccaagaa
                                                                                                                                                                              1380
actitigating ctacchatct concine accasting and ccancecte and continue actitions are actitionally activities and continue actitions are activities and continue actitions are activities and continue activities and continue activities are activities and continue activities and continue activities and continue activities activities activities and continue activities activi
cgactggctt cccgtaggta ccagcaacct gcttctgact ggccagcccc ctcccctgct
                                                                                                                                                                               1440
                                                                                                                                                                              1500
ggaggagggg agaageceeg etetggteet accetteagt etetgetett cetteateaa
ccaccttccc caagettagt gacageagec gcccatecta cctggatgga gaagagacce
                                                                                                                                                                              1560
                                                                                                                                                                               1620
ttetecaage aceteagege acttgeeete tgecacacet gteggtggag getgtggeca
                                                                                                                                                                              1680
ggagagactg tagaagctcg gtccctgtgt atgtttgcat atgacatcct gcattggatc
cgcttttgta ttttttaacc atacceaegg tggggcgggt ggggggagcc tggaacagtg
                                                                                                                                                                              1740
                                                                                                                                                                              1800
accagatetg ggggcetgag tggggacaga gttgategte cacetggeca ttttgaceet
                                                                                                                                                                              1860
gagtggacag tcacagcctc agctcatgtc tggctgtgac acacactgcc cccagcttcc
                                                                                                                                                                               1920
cttggtcagc cccactccag cacggggtga acggaggccc agagtactag ggaaggagga
agggaggaca tgcctcttct tcctcctttc tttccccatc tgttcctggg aagagtttgt
                                                                                                                                                                               1980
                                                                                                                                                                              2040
ctttcttatc tttaagcccc tttaccctgg tcctgtactg atcagtgaag gaaaccgtgg
ttactgaggc cctgttgaaa agtgcacgtc ttgtccaata aatcacgctg cagttggtgt
                                                                                                                                                                              2100
                                                                                                                                                                               2111
ccaaaaaaaa a
```

```
<210> 4896
<211> 1849
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1487)
<223> similar to gi5911314 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4896
atgecteagt tactgeaaaa cattaatggg atcategagg cetteaggeg etatgeaagg
                                                                       60
acggagggca actgcacagc gctcacccga ggggagctga aaagactctt ggagcaagag
                                                                      120
tttgccgatg tgattgtgaa accccacgat ccagcaactg tggatgaggt cctgcgtctg
                                                                      180
ctggatgaag accacacagg gactgtggaa ttcaaggaat tcctggtctt agtgtttaaa
                                                                      240
gttgcccagg cctgtttcaa gacactgagc gagagtgctg agggagcctg cggctctcaa
                                                                      300
gagtetggaa geeteeacte tggggeeteg eaggagetgg gegaaggaea gagaagtgge
                                                                      360
actgaagtgg gaagggcggg gaaagggcag cattatgagg ggagcagcca cagacagagc
                                                                      420
cagcagggtt ccagagggca gaacaggcct ggggttcaga cccagggtca ggccactggc
                                                                      480
tetgegtggg teageageta tgacaggeaa getgagteee agagecagga aagaataage
                                                                      540
                                                                      600
ccgcagatac aactctctgg gcagacagag cagacccaga aagctggaga aggcaagagg
aatcagacaa cagagatgag gccagagaga cagccacaga ccagggaaca ggacagagcc
                                                                      660
caccagacag gtgagactgt gactggatct ggaactcaga cccaggcagg tgccacccag
                                                                      720
actgtggagc aggacagcag ccaccagaca ggaagaacca gcaagcagac acaggaggcc
                                                                      780
accaatgacc agaacagagg gactgagacc cacggtcaag gcaggagcca gaccagccag
                                                                      840
                                                                      900
gctgtgacag gaggacatgc tcagatacag gcagggacac acacccagac acccacccag
                                                                      960
accgtggagc aggacagcag ccaccagaca ggaagcacca gcacccagac acaggagtcc
accaatggcc agaacagagg gactgagatc cacggtcaag gcaggagcca gaccagccag
                                                                     1020
gctgtgacag gaggacacac tcagatacag gcagggtcac acaccgagac tgtggagcag
                                                                     1080
```

```
gacagaagcc aaactgtaag ccacggaggg gctagagaac agggacagac ccagacgcag
                                                                     1200
ccaggcagtg gtcaaagatg gatgcaagtg agcaaccctg aggcaggaga gacagtaccg
ggaggacagg cccagactgg ggcaagcact gagtcaggaa ggcaggagtg gagcagcact
                                                                     1260
cacccaagge getgtgtgae agaagggeag ggagacagae ageccacagt ggttggtgag
                                                                     1320
qaatgggttg atgaccactc aagggagaca gtgatcctca ggctggacca gggcaacttg
                                                                     1380
cataccagtg tttcctcagc acagggccag gatgcagccc agtcagaaga gaagcgaggc
                                                                     1440
atcacageta gagagetgta tteetaettg agaageaeca agecatgaet teecegaete
                                                                     1500
caatgtccag tactggaaga agacagctgg agagagtttg gcttgtcctg catggccaat
                                                                     1560
ccagtgggtg catccetgga catcagetet teattatgca gettecettt taggtettte
                                                                     1620
tcaatgagat aatttctgca aggagctttc tatcctgaac tcttctttct tacctgcttt
                                                                     1680
geggtgeaga ceeteteagg ageaggaaga eteagageaa gteaceeett tgtactgaat
                                                                     1740
                                                                     1800
tgtcctcatc ttgggggggg tttcaggact atttttatct ctgacatctc tctattgccc
catctaccct aatgcatcaa taaaacctta agccactgga aaaaaaaaa
                                                                     1849
```

```
<210> 4897
<211> 421
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (113)...(321)
<223> similar to gi212485 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4897
eggaegegtg ggeagageag catateteea teattggeat teaceateae tatgaaggge
                                                                       60
ttcactgctt ttgccatcct tggtctagca gtcactgctt gggctacctc gccatatggg
                                                                      120
acaaagagat caagaatttc aactcagaaa acttcatgaa ggtaaatgta ttcagtgtac
                                                                      180
caggitatici gaggitatgia ccatggacta cacacticac tgtggatcig atggatatgi
                                                                      240
atattccaac agatgtacct tttgcaatac cgttgtgaag agccaaggtg caatttggtt
                                                                      300
gaaaaattat ggattgtgct gaatctccct gatgcttaag gatatcaagt ctcctttggc
                                                                      360
agattccact tagataacca gtttgtcttg gacggctgag gaggcaagca ataatctggt
                                                                      420
                                                                      421
```

```
<210> 4898

<211> 792

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(793)

<223> n = a,t,c or g

<220>
```

<221> misc_feature <222> (696)...(174) <223> similar to gi3873871 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 4898 ttttttttt ttctcggcac aaaagctcat gatttaatga ggaacagaaa caaaatctct 60 gattgttggt gtttcaaact tcattggcgt cctctggcaa gcacaagttg atccctctgc 120 agetteaata ceetttagee tgatgacage tteatttaac agateatttt teettgatgg 180 aggtggcaag cgtaacagtg ttctgggcct gcttcagtaa tggcatgtcg atcatactcc 240 cttggaaagt aaaggccccc tttcctaatt gttgatgttc tttaaaggca gcaatcagtt 300 cttcagccca cttaattttt tcaggggaag gagaaaactg ctcctggacc acggcaattt 360 ggttagggtg aatcacctgc ttaccagtga agcccatggc ggctccttct cgtgactgtc 420 taagcagccc agctccatct cgaaagtcaa tgtacaccag atctacggct tggagaccaa 480 aggetttege tatgacaaca atettttgee gggegtagag aatateeagg gtttetttae 540 tacttgttgc acctatgctg gctcgaaagt cttctcctcc aaaaacgact gcatctagaa 600 agagacetae ttgaggeeg acetteaggg tttetteaca caetgeetta aaattgagea 660 aacccattgc agtttccaca aaagggatta aattcattgg ttgttcaagt tttcqqcctt 720 ttaagtggaa tgaaaatttg tctgcaaact aaaatcagaa gtgaattcgc gcacacaacn 780 tagggtctcg at 792

```
<210> 4899
<211> 3414
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1192)
<223> similar to gi386787 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 4899
ggcaggaggg agggagccag aggaaaagaa gaggaggaga aggaggagga cccggggagg
                                                                       60
gaggcgcggc gcgggaggag gaggggcgca gccgcggagc cagtggcccc gcttggacgc
                                                                      120
getgetetee agataceeee ggageteeag eegegggat egegggetee egeegetetg
                                                                      180
eccetaaact tetgeegtag etceetttea ageeagegaa tttatteett aaaaccagaa
                                                                      240
actgaacctc ggcacgggaa aggagtccgc ggaggagcaa aaccacagca gagcaagaag
                                                                      300
agetteagag ageageette eeggageace aacteegtgt egggagtgea gaaaceaaca
                                                                      360
agtgagaggg cgccgcgttc ccggggcgca gctgcgggcg gcggggagcag gcgcaqqaqq
                                                                      420 "
aggaagegag egeceeegag eecegageee gagteeeega geetgageeg caategetge
                                                                      480
ggtactctgc teeggatteg tgtgegeggg etegeegage getgggeagg aggettegtt
                                                                      540
ttgccctggt tgcaagcagc ggctgggagc agccggtccc tgggggaatat gcggcgcgc
                                                                      600
tggatcctgc tcaccttggg cttggtggcc tgcgtgtcgg cggagtcgag agcagagctg
                                                                      660
acatetgata aagacatgta cettgacaac agetecattg aagaagette aggagtgtat
                                                                      720
cctattgatg acgatgacta cgcttctgcg tctggctcgg gagctgatga ggatgtagag
                                                                      780
agtocagago tgacaacato togacoactt coaaagatao tgttgactag tgotgotoca
                                                                      840
```

```
aaagtggaaa ccacgacgct gaatatacag aacaagatac ctgctcagac aaagtcacct
                                                                     900
gaagaaactg ataaagagaa agttcacctc tctgactcag aaaggaaaat ggacccagcc
                                                                     960
gaagaggata caaatgtgta tactgagaaa cactcagaca gtctgtttaa acggacagaa
                                                                    1020
gtectageag ctgtcattgc tggtggagtt attggctttc tetttgcaat ttttettate
                                                                    1080
ctgctgttgg tgtatcgcat gagaaagaag gatgaaggaa gctatgacct tggagaacgc
                                                                    1140
aaaccatcca gtgctgctta tcagaaggca cctactaagg agttttatgc gtaaaactcc
                                                                    1200
aacttagtgt ctctatttat gagatcactg aacttttcaa aataaagctt ttgcatagaa
                                                                    1260
taatgaagat ctttgttttt tgttttcatt aaagagccat tctggcactt taatgataaa
                                                                    1320
atcccattgt âtttaaaaca tttcatgtat ttctttagaa caacataaaa ttaaaattta
                                                                    1380
acatctgcag tgttctgtga atagcagtgg caaaatatta tgttatgaaa accctcgatg
                                                                    1440
ttcatggaat tggtttaaac ttttatgcgc aaatacaaaa tgattgtctt tttcctatga
                                                                    1500
ctcaaagatg aaagctgttt catttgtgtc agcatgtctc agattgacct taccaagttg
                                                                    1560
gtettaettt gttaatttat etgttgteee etteetetee tetgeeetee ettettgtge
                                                                    1620
cettaaaace aaacectatg cettttgtag etgtcatggt gcaatttgte tttggaaaat
                                                                    1680
tcagataatg gtaatttagt gtatatgtga ttttcaaata tgtaaacttt aacttccact
                                                                    1740
ttgtataaat ttttaagtgt cagactatcc attttacact tgctttattt ttcattacct
                                                                    1800
gtagetttgg geagatttge aacageaaat taatgtgtaa aattggatta ttactacaaa
                                                                    1860
                                                                    1920
accetttagt catatetate taateagate ttettttggg aggatttgat gtaagttaet
gacaagcctc agcaaaccca aagatgttaa cagtatttta agaagttgct gcagattcct
                                                                    1980
ttggccactg tatttgttaa tttcttgcaa tttgaaggta cgagtagagg tttaaagaaa
                                                                    2040
aatcagtttt tgttottaaa aatgoattta agttgtaaao gtotttttaa gootttgaag
                                                                    21'00
tgcctctgat tctatgtaac ttgttgcaga ctggtgttaa tgagtatatg taacagttta
                                                                    2160
aaaaaaaagt tggtatttta taagcacaga caattctaat ggtaactttt gtagtcttat
                                                                    2220
gaatagacat aaattgtaat ttgggaacat aaaaactact gaataaatca tgtggcctaa
                                                                    2280
tattgaaaat gtcactgtta taaattttgt acatttttga tcaaatgtac atctccctt
                                                                    2340
tgctaacggc cgtctgctct caggttgacg tgggtttgat ttctaagtgt ttcacagtgt
                                                                    2400 ·
ctgtaaatca agaccaaaga gcctgtcgat gagactgttt attaccagat tcacttctga
                                                                    2460
attggccaga ggaaatctga atgtattatc ctgtgtgtgt ctaggtagag atattggaag
                                                                    2520
getgecaggg gatttegaag titgeaacet ttataggata actgatggea atattaagae
                                                                    2580
agacgcctgc ttttgcaaat aacttacaag actgtaaatt ccaaagatct gaatggggct
                                                                    2640
ttcctgatgt tggtatctaa ggcttaggcc tatagattga tttacctttg gaattgtgct
                                                                    2700
ccaaatgtct actgaagctt aaccgaagaa ctaataaatg gactacagta gctcacgtta
                                                                    2760
cagggaacca ccctaggcag ggaggctctg tgtgttaaaa tgagggtctc actgctttag
                                                                    2820
gattgaagtg gctggaaaga gtgatgcctg gggaaggaga tggagttatg agggtactgt
                                                                   2880
ggctggtact ttctgtacta aacatttcct ttttctattt taccactaat tttcttttaa
                                                                   2940
actgtgagcc gtccaagtca gaagaagaca gcaaaaaaag caacttttcc aacatacaat
                                                                    3000
ttacttttaa taaagtatga atatttcatt ttgagaacat tccctggaat tgccacataa
                                                                    3060
ttcattaaaa acatttttt aagcaacact tggaacagtg tttactttaa atccttaatg
                                                                   3120
gccttaatta attctcagat tcctgcccca tcacttacag aaccaattca ctttagagtg
                                                                   3180
actaaaagga aacgatagcc tagctttcta aagccacgct gtgtccctca attacagagg
                                                                    3240
3300
aactgctggg aatatccgtg ccaggaaaag aaaaatttct ggcaaatatt ttgtcactgc
                                                                   3360
tgtaaagcaa aatatttgtg aaagtgccaa aataaagtct gtcatgccaa aagt
                                                                    3414
```

```
<210> 4900
<211> 1463
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (145)...(702)
<223> similar to gi3928000 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 4900
cgtgtgctcc tcacattcac gcagactgag actgagctgc ccgaggaaga gtgtgaaggc
                                                                    60
cccaagetge ccacegaacg gccctgccte ctggaageat gtgatgagag cccggcctee
                                                                   120
cgagagctag acatccctct ccctgaggac agagagacga cttacgactg ggagtacgct
                                                                   180
gggttcaccc cttgcacagc aacatgcgtg ggaggccatc aaqaagccat aqcagtqtgc
                                                                   240
ttacatatcc agacccagca gacagtcaat gacagcttgt gtgatatggt ccaccgtcct
                                                                   300
ccagccatga gccaggcctg taacacagag ccctgtcccc ccaggtggca tgtgggctct
                                                                   360
tgggggccct gctcagctac ctgtggagtt ggaattcaga cccgagatgt gtactgcctg
                                                                   420
cacccagggg agacccctgc ccctcctgag gagtgccgag atgaaaagcc ccatgcttta
                                                                   480
caagcatgca atcagtttga ctgccctcct ggctggcaca ttgaagaatg gcagcagtgt
                                                                   540
tecaggaett gtggegggg aacteagaac agaagagtea cetgteggea getgetaacg
                                                                   600
gatggcagct ttttgaatct ctcagatgaa ttgtgccaag gacccaaggc atcgtctcac
                                                                   660
aagtcctgtg ccaggacaga ctgtcctcca catttagctg tgggagactg gtcgaaggag
                                                                   720
cattcaatgc aagaggacaa tggagcagga tctacacaat tctaaagaaa agcaagcatg
                                                                   780·
actcaaggat ttcctcttca tcctgtgttc ttcatgtaga gagacagcag agaggcagtc
                                                                   840
agagaatact gtctgataag cccttgaaaa agctgtaggg ccaagatgag atacagagat
                                                                   900
gactcaaaac agagaatcca ggaatgcata gatcctggta aaaaaggtgg gagatgagta
                                                                   960
1020
ataaatatca gaaatcttga cattatctaa ataataaaat gaaaactaat tgagatttgg
                                                                  1080
agagatgagg tagatgatat agtttggctg tgtccccacc caaatctcat attgaattgt
                                                                  1140
ageteecata ateeecatgt gttgtgggag ggaeecagta agaggtaatt gaateatggg
                                                                  1200
gatgggtttt teteatactg ttettgtgac agtgaataag teteatgaga tatgatggtt
                                                                  1260
tcataaaggg cacttcccct gcacacgttc tcttgcttgc cagcatataa gacataacta
                                                                  1320
cataactttg ctcctccttt gccttctgcc atgattatga ggcctcccca ggcatgtgga
                                                                  1380
actgagicaa tiaaacctci tittettiat aaattaccca gietigggia tigeticata
                                                                  1440
gcagtttgat aatgaatgaa tac
                                                                  1463
```

```
<210> 4901
<211> 1330
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (200)...(633)
<223> similar to gi2996196 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4901
cttctcacca ccaccctcta gcagctccct cactggagag gcggccatca gccgcagctt 60
ccagagtctg gcatgttccc cgggcctccc cgctgctgac cgcctgtcct actcaggccg 120
ccctggaagc cgacaggccg gcctcggccg cgctggcgac tcggcggtgc tggtgctgcc 180
gccttccccg ggccctcgtt cctccaggcc cagcatggac tcggaagggg gaagcctcct 240
cctggacgag gactcggaag tcttcaagat gctgcaggaa aatcgcgagg gacgggcggc 300
cccccgacag tccagctcct ttcggctctt gcaggaagcc ctggaggctg aggagagagg 360
```

```
tggcacgcca gccttcttgc ccagctcact gagcccccag tcctccctgc ccgcctccag
                                                                      420
ggccctggcc acccctccca agctccacac ttgtgagaag tgcagtacca gcatcgcgaa
                                                                      480
ccaggctgtg cgcatccagg agggccggta ccgccacccc ggctgctaca cctgtgccga
                                                                      540
ctgtgggctg aacctgaaga tgcgcgggca cttctgggtg ggtgacgagc tgtactgtga
                                                                      600
gaagcatgcc cgccagcgct actccgcacc tgccaccctc agctctcggg cctgagcccg
                                                                      660
ccatgccctc agcctgcctc actgctgggc cagggtcatg cctatataag ttggcatggc
                                                                      720
agggacaatg gtgggcagtt gctcttacat gagctaagtt tggagacctg aggccccttt
                                                                      780
gtcctcgctg ggtgggccaa ggtctgggac ctgtcttgga ctgtgggaga ctcaccctca
                                                                      840
ccttgccagg cctctcccct gcaggactgg cattgcacta gtctgaggtg gccactgcct
                                                                      900
ttgatcaacc tttgtgtgcg agggtctaag tagggtcgaa cacagaagtg ggaaggagag
                                                                      960
gggtgggcca ggggctaatg gtgtcactgt gtaaagtttt tgacatacta gctctataaa
                                                                     1020
tatatgaata tggacaaaaa aaaaaaaag ggggggccgt tttaaaggat ccttgggggg
                                                                     1080
gccaaagttt acgcgggctt gcaacgtcat agttttttcc ttatagggag tcgaattata
                                                                     1140
acctacctgg gaatttttgg aaaggaccct tatttttggg gggggacata ttgggacaaa
                                                                     1200
ctccctacag aaattaaagg ctttagggaa aatataaaat tttaaagggt ataaggggta
                                                                     1260
aaacaacctg catatgctgg ctgtttgaaa gttttgctaa cggagtttga tttatgaaaa
                                                                     1320
ttttatcccg
                                                                     1330
```

```
<210> 4902
<211> 738
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (15)...(372)
<223> similar to gi2232174 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4902
ggaattcggc ggccgacctg gccatctttg ccctttgggg gctcaagccc gtggtctacc
                                                                       60
tgctggccag ctccttcctg ggcctgggcc tgcaccccat ctcgggccac ttcgtggccg
                                                                      120
agcactacat gttcctcaag ggccacgaga cctactccta ctatgggcct ctcaactgga
                                                                      180
tcaccttcaa tgtgggctac cacgtggagc accacgactt ccccagcatc ccgggctaca
                                                                      240
acctgccgct ggtgcggaag atcgcgcccg agtactacga ccacctgccg cagcaccact
                                                                      300
cctgggtgaa ggtgctctgg gattttgtgt ttgaggactc cctggggccc tatgccaggg
                                                                      360
tgaagcgggt gtacaggctg gcaaaagatg gtctgtgagc ccgggctgcc tcctggtggt
                                                                      420
ggccattgtc ccccatcggc ccctcagcct tgcaccccag cactgagaag ctacatttcc
                                                                      480
tteetgtget etggaetget geeettgtee eegaggagtg teeegegeag ceacacetgg
                                                                      540
caacagcagt gtgggctgca gggctccgtc tgcacgtgga cttgccctgg accttgagtg
                                                                      600
tggccctccc tttctgggcc tccccaggtg aggcctggcc ctgccccacc atgacctggg
                                                                      660
tgctctgagc ccacggttcc cacggagctg acttctccgg ggtgcctgtg ccctacatta
                                                                      720
aacccggcgt ttgtttca
                                                                      738
```

```
<210> 4903 <211> 2299
```

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (196)...(1235)
<223> similar to gi5596646 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4903
ageatggagg ggettgeete tgtteatate tettgeetet gtteatttet tttgggteee
                                                                       60
ctttcctcct tttccctcca tcccactgta agcaatttag tgggattcag tcattaaaag
                                                                      120
                                                                      180
ggtattaggc tgaaatgtgc aagcgctgcc caagcccagg gtggttctca caggatcccc
actgtccctg tcccccagga accaaacgcc aacagtgtag cttggaacac ccagtgtgag
                                                                      240
gacatgetet getteteggg aggaggetae etcaacatea aagecageae etteeetgtg
                                                                      300
                                                                      360
caccggcaga agetgcaggg ctttgtggtc ggctacaatg gctccaagat cttctgcctc
catgtettet ccatttetge egtggaggtg cegeagteeg etcecatgta ccagtacetg
                                                                      420
gataggaaac tgttcaagga agcctaccag attgcttgct tgggtgtcac agacactgat
                                                                      480
tggcgtgaac tggccatgga agcgctagaa ggtttagatt ttgaaacagc aaagaaggag
                                                                      540
                                                                      600
aggaagaagc ggggagagac caacaatgac ctgtttctgg cagatgtgtt ttcctaccag
                                                                      660
gggaagttee atgaggeege caaactgtae aagaggagtg ggeaegagaa cetegegett
                                                                      720
gaaatgtaca ccgacctctg catgtttgag tatgccaagg atttccttgg atctggagac
                                                                      780
cccaaagaaa caaagatgct aatcaccaaa caggctgact gggccagaaa tatcaaggag
cccaaagccg ccgtggagat gtacatctca gcaggagagc acgtcaaggc catcgagatc
                                                                      840
tgtggtgacc atggctgggt tgacatgttg atcgacatcg cccgcaaact ggacaaggct
                                                                      900
                                                                      960
gagegegage ceetgetget gtgegetace taceteaaga agetggacag ceetggetat
gctgctgaga cctacctgaa gatgggtgac ctcaagtccc tggtgcagct gcacgtggag
                                                                     1020
acceageget gggatgagge etttgetttg ggtgagaage atectgagtt taaggatgae
                                                                     1080
                                                                     1140
atctacatgo ogtatgotca gtggotagoa gagaacgato gotttgagga agoccagaaa
                                                                     1200
gegttecaca aggetgggeg acagagagaa geggtecagg tgetggagea geteacaaac
                                                                     1260
aatgccgtgg cggagagcag gtttaatgat gctgcctatt attactggat gctgtccatg
                                                                     1320
cagtgcctcg atatagctca agatcctgcc cagaaggaca caatgcttgg caagttctac
cacttccagc gtttggcaga gctgtaccat ggttaccatg ccatccatcg ccacacggaa
                                                                     1380
gateegttea gtgteeateg teetgaaaet etttteaaea teteeaggtt eetgetgeae
                                                                     1440
agcetgeeca aggaeacece etegggeate tetaaagtga aaataetett eacettggee
                                                                     1500
                                                                     1560
aagcagagca aggccctcgg tgcctacagg ctggcccggc acgcctatga caagctgcgt
ggcctgtaca tccctgccag attccaaaag tccattgagc tgggtaccct gaccatccgc
                                                                     1620
gccaagccct tccacgacag tgaggagttg gtgcccttgt gctaccgctg ctccaccaac
                                                                     1680
aaccegetge teaacaacet gggeaacgte tgeateaact geegeeagee etteatette
                                                                     1740
teegeetett eetaegaegt getaeaeetg gitgagtiet aeetggagga agggateaet
                                                                     1800
gatgaagaag ccatctccct catcgacctg gaggtgctga gacccaagcg ggatgacaga
                                                                     1860
cagctagaga ttgcaaacaa cagctcccag attctgcggc tagtggagac caaggactcc
                                                                     1920
ateggagatg aggaccegtt cacagetaag etgagetttg agcaaggtgg etcagagtte
                                                                     1980
gtgccagtgg tggtgagccg gctggtgctg cgctccatga gccgccggga tgtcctcatc
                                                                     2040
aagcgatggc ccccacccct gaggtggcaa tacttccgct cactgctgcc tgacgcctcc
                                                                     2100
attaccatgt gececteetg ettecagatg ttecattetg aggaetatga gttgetggtg
                                                                     2160
cttcagcatg getgetgeec ctactgeege aggtgeaagg atgaceetgg eccatgacea
                                                                     2220
gcatcetggg gacggcetge accetetgee egeettgggg tetgetggge tgtgaaggag
                                                                     2280
aataaagagt taaactgtc
                                                                     2299
```

```
<210> 4904
<211> 1083
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1007)...(458)
<223> similar to gi201910 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4904 tttttttttg gagttcataa aatcttttcc gagccagcgg tatgcagcca gagctccaaa 60 gttcaaaggc attgccgttg ggttcaagtg cccccaagg ctgttgctca gtcacagctt 120 ccagagette etteccacca caetgecagg agetgecaga gececcatge ageceetgae 180 cccagttccc tcccaagtcc cagggcctga ccctggatat ctggggcaag gtgctcggga 240 catagataag tgaaatggtg tgcagaggcc cagtggagag tcacatctcg gtctcagcca 300 acagactgtc ccctagtcct gacgtcatta gcaccatctg agagctggga tcgctggggc 360 acatecagga getgetgeet etetggtggg cageaggete eegeeetete teecatteet 420 tggtggttgg cagcccctcc tgccacttcc tcctcctcct ctccctcaga gaggaggtca 480 cagatetgtt getgeagete tgggetaatg etgtteteag ecaacaceag geteegeaaa 540 gctgtggggt aattttctac catgtccagc agggtctgag ctgactggtt ggtgagccct 600 gtgccctcca agtctaggac ctctagggta cgactagagg ccacagctac agccagcatt 660 cctgccacat ggtcacccag ggggttgtaa tccagattga ggacgcggac ctgggagctg 720 tgggccacgg caatggcaag gcggctccag cccttagggg tgatgccagg gttggcactc 780 agegttaget cetteaagee agatttggee ceatetgggg geaggaggee acagatgagg 840 ttgatggett catcacccag catgcagtec eccaggteca gagecaegag ggcagggtgg 900 agggccaggg ctgggttcag caaggccagc cccgcatctg tcagggggct cccatgcagg 960 aagagggact ggatggageg gttggteege agageeteag eeagetgett gatgeggetg 1020 gggctggaca cgacgcccag gttaaggttg aggaattcca ccgctctgca aatgatctca 1080 att 1083

```
<210> 4905
<211> 2723
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2518)...(2261)
<223> similar to gi5410249 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4905

ccactatatt tgtaaaagtt atgtgattgt atgactacag ctcttctgtg gtacctacag  60
gttgatacaa atcattaaaa atcaaaacat caacgtatct aagaaccaaa tggtgcatgt  120
gactccccgg agaaggatat atatgccatg ttgccacttg aaggagaatc ttccaggcat  180
```

```
240
caaatcccgt ggattctctt attttctttc acattccctc tgcttttcct cacagtcggc
taccacqctc tgaggagccc cgtgccatct ccatttcccc catccctttt tcactttgcc
                                                                      300
tcacaccagt caaatccaaa tatccgagag tcagacactg ggagactgtc tgcttcttgg
                                                                      360
                                                                      420
gcaactccca ggtggttatg atacgcttcc cggaccgcaa cactgaccta cggaactgaa
atgatgaatt catgtcagaa gaaataggat ttggggaaga attcattacc tggaccattt
                                                                      480
                                                                      540
tcagcagctg gaataaaaag tacttaacaa caacaacaaa aatcacacac aaagtccaaa
                                                                      600
aagtgttttg aaaaagtgct ttgagaattt actgtacagt ttttttaaac aatttattta
tatgttggct tctacatgct cttacattcg tgtaaaacat ttatacatat tctttacaat
                                                                      660
                                                                      720
ttgtacatat attaaatggc tatagcataa acattgttct atgggatttt atagaagaaa
                                                                      780
aatcaagtgg ggagaattac ttatgaaaca ttaacaaaaa cccgtgatat tgaagaacaa
gatgttetca tatteatttg attteateta ettatttttg gtgteatttt attgatgetg
                                                                      840
gcccagactt tccatttccc gtaattatta ggtcagaaaa atgaaagcag cgggagggaa
                                                                      900
                                                                      960
cgcggtaagg cacctgtggg agacgggagc gctcctccgc aggggtgaga cggtggctgc
                                                                     1020
cagtgttgag ttcgagctga cggtgtgcca aggtcctgtt ttgctttatg ccgttaagtg
aagcgctgga agtgctggtg ctcagaaaca ccctgtgtga agtttcggat gtagtcagga
                                                                     1080
agggcgctgg tctgttcttt ctctccaacc tcagagcgcc ggggactctg tacactgctg
                                                                     1140
aggetgeage cetteteagt ceetacactt ttecatetaa tggggageta acetgtgett
                                                                     1200
tttctctttg ctgatgacac caactggcca tgaacccgcc acccaagcca agcagtgtgc
                                                                     1260
cgtggccaca gcagcgcttc tcatcacggt ggatgaggag ccaaagaata agaaagggcc
                                                                     1320
agagacgccg gggtgctggg tgccctcctt cccccaggcc ctcccgaaca caggcctccg /
                                                                     1380
cacagocact caccogttgg accaaagoca caaaattoto tacaaagtoo otcaattott
                                                                     1440
ctaatgtatt cttcatggca taaaacatgc cttaaccaag attaggaagg aagtgcaaag
                                                                     1500
agagaaagca ctggtcctca cataagagca gcacatcaga aatgtcgctg aggacatggg
                                                                     1560
tggccagggg tatctgctca tctgccccag gcctgtgggg tcccccctgg agggacatgg
                                                                     1620
ggatggcccc acctggccca cacacccacg atgggcacta gcagccccca ggggcccccc
                                                                     1680
accetccccc ccctcttgaa gtgtaagcac ttgaagctgt gaactgtggc agtgaaaggc
                                                                     1740
gtaacgactt ccctcaatga caggagccc agaggactga aaggagttat aaaaatatac
                                                                     1800
aaacatagat attttttatt ctggcatagt tcatgttttt aagaaagtaa ttagtaatta
                                                                     1860
attatctgac actgggtaag aactggaaga ttgtgggaga cttataaatt atataagact
                                                                     1.920
tataatttat aagacatata aattatgact ctatgtaaaa tatcagtggg gagaaacccc
                                                                     1980
tcattttcca ttgaaaattc tggtaacttt taagtacttt ccaaaaatag agacaatttc
                                                                     2040
cactggttta aataatggat gcggaaatga acaaaagacc atccctaaat aactgacgca
                                                                     2100
tttagggtgg ctaataaaat aaatgcagtt ttttgcaact ctttcttttt ggttttgttt
                                                                     2160
cctttttttt ctgaataata ggggaaaaaa agttttgaat tgcattgccc caagtcagga
                                                                     2220
gaaagcacgc ggcattctct tcaaggcccg ttctgtccta catcactgga aagcggctga
                                                                     2280
gggcctgcct cagcttttct gcaatcgttt cgtaaaattg cacttgctgc tccaggtaca
                                                                     2340
ggcggatgac actgttgtaa tcatagatcc ggttactgtg aaagtgattc atctcagctt
                                                                     2400
gcaacgcgta agacatgatg ctgactctct tcaccatgtt ctgtttgtct tgtagggtga
                                                                     2460
ttttacttgt tgcaactagt ttgtcacttt ctttcacttt ttctattgct ccctgtgaaa
                                                                     2520
tataaaatgc agcagtatga ataaagctga aatgattagt cattagttta aaatataaca
                                                                     2580
atgotaatat attotataac tgatttgotg otgaacagga aatacotoca caaaataaga
                                                                     2640
agagaggaaa gcatctaaat ttaacttcct tcaagtccct ggaagcaaaa ggtgaattcc
                                                                     2700
tccgctaggg catcgaactc gag
                                                                     2723
```

```
<210> 4906
<211> 2693
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (664)...(1218)
<223> similar to gil710175 in the genepept database release 114,
```

```
<400> 4906
geggeegegg getgeatggg cagegeege geeeegeege tgageegteg eggageegeg
                                                                       60
cagccetegg ageaegeeeg tgeageetge caggaetett ceagacaegg gatttgtegg
                                                                      120
tgaacaacgc agagctgatg cagacataat atatacagcc ctgcacctgg gacacacttc
                                                                      180
cattggattt aaaagacagt cctcgtcagc actgactttc agctatggaa tcgcagacgg
                                                                      240
ttgatgatga agcgccggcc gtgtaaatga agatcgagtg aggagcagga cgatgcccaa
                                                                      300
gggtagggtg cccttaaagc cccccaacaa ggaagagctt tcccctcagc agcgaccatg
                                                                      360
gtggagaacc agcctgggaa aaaagataaa gataaagttt ctctaaccaa gaccccaaaa
                                                                      420
ctggagcgtg gcgatggcgg gaaggaggtg agggagcgag ccagcaagcg gaagctgccc
                                                                      480
ttcaccgcgg gcgccaatgg ggagcagaag gactcggaca cagagaagca gggccctgag
                                                                      540
cggaagagga ttaagaagga gcctgtcacc cggaaggccg ggctgctgtt tggcatgggg
                                                                      600
etgtetggaa teegageegg etaceeete teegagegee ageaggtgge eetteteatg
                                                                      660
cagatgacgg ccgaggagtc tgccaacagc ccagtggaca caacaccaaa gcaccctcc
                                                                      720
cagtctacag tgtgtcagaa gggaacgccc aactctgcct caaaaaccaa agataaagtg
                                                                      780
aacaagagaa acgagcgtgg agagaccegc ctgcaccgag ccgccatccg cggggacgcc
                                                                      840
cggcgcatca aagagctcat cagcgagggg gcagacgtca acgtcaagga cttcgcaggc
                                                                      900
tggacggcgc tgcacgaggc ctgtaaccgg ggctactacg acgtcgcgaa gcagctgctg
                                                                      960
getgeaggtg eggaggtgaa caccaaggge etagatgaeg acaegeettt geaegaeget
                                                                     1020
gccaacaacg ggcactacaa ggtggtgaag ctgctgctgc ggtacggagg gaacccgcag
                                                                     1080
cagagcaaca ggaaaggcga gacgccgctg aaagtggcca actcccccac gatggtgaac
                                                                     1140
ctcctgttag gcaaaggcac ttacacttcc agcgaggaga gctcgacgga gagctcagaa
                                                                     1200
gaggaagacg caccatcett egcacettee agtteagteg aeggeaacaa caeggaetee
                                                                     1260
gagttegaaa aaggeeteaa ageacaagge ecaagaacee agageeacag aaggeeacgg
                                                                     1320
ccccgtcaa ggacgagtat gagtttgatg aggacgacga gcaggacagg gttcctccgg
                                                                     1380
tggacgacaa gcacctattg aaaaaggact acagaaaaga aacgaaatcc aatagtttta
                                                                     1440
tctctatacc caaaatggag gttaaaagtt acactaaaaa taacacgatt gcaccaaaga
                                                                     1500
aagcgtccca tcgtatcctg tcagacacgt cggacgagga ggacgcgagt gtcaccgtgg
                                                                     1560
ggacaggaga gaagctgaga ctctcggcac atacgatatt gcctggtagt aagacacgag
                                                                     1620
agccttctaa tgccaagcag cagaaggaaa aaaataaagt gaaaaagaag cgaaagaaag
                                                                     1680
aaacaaaagg cagagaggtt cgcttcggaa agcggagcga caagttctgc tcctcggagt
                                                                     1740
cggagagcga gtcctcagag agtggggagg atgacaggga ctctctgggg agctctggct
                                                                     1800
gcctcaaggg gtccccgctg gtgctgaagg acccctccct gttcagctcc ctctctgcct
                                                                     1860
ectecacete gteteaeggg agetetgeeg eccagaagea gaaceceage cacacagace
                                                                     1920
agcacaccaa gcactggcgg acagacaatt ggaaaaccat ttcttccccg gcttggtcag
                                                                     1980
aggtcagttc tttatcagac tccacaagga cgagactgac aagcgagtct gactactcct
                                                                     2040
ctgagggctc cagtgtggaa tcgctgaagc cagtgaggaa gaggcaggag cacaggaagc
                                                                     2100
gagecteect gteggagaag aagageeeet teetgteeag egeggaggge getgteecea
                                                                     2160
aactggacaa ggaggggaaa gttgtcaaaa aacataaaac aaaacacaaa cacaaaaaca
                                                                     2220
aggagaaggg acagtgttcc atcagccaag agctgaagtt gaaaagtttt acttacgaat
                                                                     2280
atgaggactc caagcagaag tcagataagg ctatactgtt agagaatgat ctttccactg
                                                                     2340
aaaacaagct aaaagtgtta aagcacgatc gcgaccactt taaaaaaagaa gagaaactta
                                                                     2400
gcaaaatgaa attagaagaa aaagaatggc tctttaaaga tgaaaaatca ctgaagagaa
                                                                     2460
tcaaagacac aaacaaagac atcagcaggt ctttccgaga agagaaagac cgttcgaata
                                                                     2520
aagcagaaaa ggagagatcg ctgaaggaaa agtctccgaa agaagaaaaa ctgagactgt
                                                                     2580
acaaagagga gagaaagaag aaatcaaaag accggccctc aaaattagag aagaagaatg
                                                                     2640
atttaaaaga ggacaaaatt tcaaaagaga aggagaagat ttttaaagaa gat
                                                                     2693
```

```
<211> 1283
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1248)...(982)
<223> similar to gil872200 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
' <400> 4907
tttcgtcgca gaggcgcggc ggctgtacaa ctcggccgtt gtcaccatgc cggtcgtccg
                                                                       60
gaagattttc cgtcgccgcc ggggcgactc ggagtcagag gaagatgagc aggactcaga
                                                                      120
ggaggttcga ttaaaactgg aagagaccag agaagtacag aacttgagga agaggcccaa
                                                                      180
eggggtgagt getgtggeet tgetggtggg agagaaggta caagaggaga ceaetetagt
                                                                      240
ggatgatçcc tttcagatga agacaggtgg tatggtggat atgaagaaac tgaaggaaag
                                                                      300
gggcaaagat aagatcagtg aggaggagga cctgcacctg gggacatcgt tttctgcaga
                                                                      360
aaccaaccga agggatgagg atgcagacat gatgaagtac attgagacag agctaaagaa
                                                                      420
gaggaaaggg atcgtggaac atgaggaaca gaaagttaag ccaaagaatg cagaggactg
                                                                      480
tetttatgaa etteeagaaa acateegtgt tteeteagea aagaagaeeg aggagatget
                                                                      540
ttccaaccag atgctgagtg gcattcctga ggtggacctg ggcatcgatg ctaaaataaa
                                                                      600
aaatatcatt tecaeggagg atgeeaagge eegtetgetg geagageage agaacaagaa
                                                                      660
gaaagacage gagaceteet tegtgeetae caacatgget gtgaattatg tgeageacaa
                                                                      720
cagattttat catgaggagc tcaacgcgcc catacggaga aacaaagaag agcccaaggc
                                                                      780
ccggcccttg agagtaggtg acacggagaa gccagagcct gagcggtccc ctcctaaccg
                                                                      840
caagcgtcct gctaacgaga aggcaactga tgactatcat tatgagaagt tcaagaaaat
                                                                      900
gaataggegg taetgagttg tgeagagtgg gatgtaaata tegeetteet eteeetatat
                                                                      960
ccctcccatg aaaaatggct tcctggccgg gcgtggtggc tcctgcctgt aatcccagca
                                                                     1020
ctttgggagg ccgaggtggg cggatcacct gaggtcggga gtttgagacc agcctgacca
                                                                     1080
acatggagaa acccagtete taetgaaaat acagaaaagt tagecaggeg tggtggeaca
                                                                     1140
tgcctgtaat cccagctgct caggaggctg aggcaggaga attgcttgaa cccaaggggc
                                                                     1200
ggaggttgtg gtgagccgag attgcacctt tgtactccag cctgggcaac gagcaaaaaa
                                                                     1260
ctctgtctca aagaaaaaaa aaa
                                                                     1283
```

```
<210> 4908
<211> 4159
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4160)...(1309)
<223> similar to gi5725506 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4908
ttttttttt ttccaaaagt gttcttttag tttctaggta acatatagtt gtataaatac 60
```

```
tctattttta tatgcacttc cacaaaagcg atataattaa aaagtttttt tcattagaaa
                                                                      120
 taaatgtata aaaataaata tgttattata ggcatttatt actaactata gtccttcttg
                                                                      180
 gaaggaacac ccaaaccaat acttataaag tacatgtaat ttatagtaac atattttact
                                                                      240
 atatacatat ggaaaaaatc atattctcac agaagagctg aacagacatt caccaggata
                                                                      300
 cgactgttgg accagctgct ggagatggac ctgctacccc tcagcagcct ccccaccaca
                                                                      360
 agacaagtga tctcaatgtc cccaaacctg tgggaccctg ttctacacac ctcatttttg
                                                                      420
 ttccggcgtt tcatcctcct tgtgtgattg tactgatttt catgagacac aagttacttc
                                                                      480
 tttacatcca tattcccaaa gcagggttac atggtaggaa agaaaggaag ttggaggtac
                                                                      540
 taageteatt gtgteteete tagettttae eageatetaa tgetteaetg ettttttee
                                                                      600
 attgtagact ttaatgcact tgaataaata catggagttg ttttttcctc aaaatgaatt
                                                                      660
 acacaaataa agactgagat ggtccaaaaa aggaaagagg aagccatttg cgttatttca
                                                                      720
 cgttgctgag cctttctctc atgttgaaca atctgaagtt ttaattctcg gtagaaataa
                                                                      780
 tgtataaaca ttctctgaaa ccatagcagc cataaacagt gctggtcaaa gatcctattt
                                                                      840
 900
 acttttctcc tacttttcat ttcccaaccc ccatgatact aagtatttga taagtaccag
                                                                      960
 gaaacagggg ttgtaatagt tctaactttt tttgacaatt gctttgtttt ttctaaactt
                                                                     1020
 gtaatagatg taacaaaaga aataataata ataatgcccg gggctttatt atgctatatc
                                                                     1080
 actgctcaga ggttaataat cctcactaac tatcctatca aatttgcaac tggcagttta
                                                                     1140
 ctctgatgat tcaactcctt ttctatctac ccccataatc ccaccttact gatacacctc
                                                                     1200
 actggttact ggcaagatac gctggatccc tccagccttc ttgctttccc tgcaccagcc
                                                                     1260
cttcctcact ttgccttgcc ctcaaagcta acaccactta aaccacttaa ctgcattctg
                                                                     1320
 ccattgtgca aaagtctatg aaatgtttag gtttctttaa aggatcacag ctctcatgag
                                                                     1380
 ataacacccc tccatcatgg gacagacact tcaagcttct ttttttgtaa cccttcccac
                                                                     1440
 aggtettaga acatgatgae caeteceeca getgecaetg ggggeaggga tggtetgeae
                                                                     1500
 aaggtctggt gctggctggc ttcacttcct ttgcacactc ggaagcaggc tgtccattaa
                                                                     1560
 tgtctcggca ttctaccagt cttctctgcc aacccaattc acatgactta gaacattcgc
                                                                     1620
 eccactette aatgaceeat getgaaaaag tggggatage attgaaagat teettettet
                                                                     1680
 tetttaegaa gtaggtgtat ttaattttag gtegaaggge attgeecaca gtaagaacet
                                                                     1740
 ggatggtcaa gggctctttg agagggctaa agctgcgaat tctttccaat gccgcagagg
                                                                     1800
 agcegetgta ceteaagaea acacetttgt acataatgte ttgetetaag gtggaeaaag
                                                                     1860.
 tgtagtcacc attaagaata tatgtgccat cagcagcttt gatggcaaga aagctgccat
                                                                     1920
 tgttcctgga tcccctctgg ttccgctgtt tcacttcgat gttggtggct ccagttggaa
                                                                     1980
 ttgtgatgat atcatgatat ccaggttttg cactagtaac tgatcctgat atttttttac
                                                                     2040
 aagtagatee attteeeeeg caaacaeeae atttateaaa ettetttttg gagtetatga
                                                                     2100
 tgcgatcaca accagctttt acacactgtc cttgcacaca gacagaggtg gaatctgggc
                                                                     2160
 tacatggagt accatctaca accttgggct gcaaaacgaa gaagtagcca atgcctttgg
                                                                     2220
 cttggcagat gagcttgcac ctgtcctttg gtgagacgcc agcgtacttg ggaatccatt
                                                                     2280
 ccaccgcagg cccactccca aaggaagett ttgaaaactc gttgtgtget tcacattgtt
                                                                     2340
 cctctctaaa ggtttttcca ttattgtctg gacagtcctc aaggttacag gatctgtagc
                                                                     2400
 gcactcgttt gccttcacag tacttccctc cattctttgg gactgggttg tcacattccc
                                                                     2460
 tcatcgtgta ctggactcct ccaccgcacg ttctcgaaca gtctccccaa ggcccccaca
                                                                     2520
 ttccccagct tccatgaaaa ggcgtatcaa aatgctttct gtcggttttg ttcacacact
                                                                     2580
 tgccgttgat acaccatttc ccttctccac agctggtgcc atccgcccac gggaagtgtt
                                                                     2640
 tggtttgaca caccagcacc ccaccagagg tgccggtaca ccacaaggtg ctacatgtgc
                                                                     2700
 tggctgcatc agggcagtgt ttggagtcct ccccaaatgt aaactggcac tgccggttgg
                                                                     2760
 catcgtacga ggtgccaggg agatcgcctg ggagctgtat gggattctga ggcttgtcca
                                                                     2820
 tcaaacattc cccatgacca ttatccagaa atgatgtaat catgtaggca ctgcaaggag
                                                                     2880
 accaaggctg gctgtggtcc aggttggaaa gcattgacgc catcatgtgg gaatcctggt
                                                                     2940
 tcacaccatt aaggctggca cactgctttg catcatcatg tggcatgtta aacacgtggc
                                                                     3000
 ctaattcatg ggctgtggtg aaggcagctt gtaaaccatc atcttctatg acggagcagc
                                                                     3060
 ttctgctcgg atcacacaca gttccaacat cagccatccc aagagtatca catgtctggg
                                                                     3120
 acccacacaa gtcctgtctg gtgaaaagaa ttgctgtgtc atagtgctct gcatcccggt
                                                                     3180
 cactgggtgg gttgtgctgc ttctgccagt tgcaaaagtt ccgcagagtg agggcagcat
                                                                     3240
 tggaggtcac ttccggcccc ttctgttcat cgtggatgac caagatcttc accaccacca
                                                                     3300
 ggctaactga attacgaatg ctggggtgtt tgtacaatct ggctgccacc gaaaacaacg
                                                                     3360
 tgagaaggta atgetttaga ceaetgeegt ggaattetge categaetgg tetgecaeaa
                                                                     3420
 gcatggtttc cacatagcgg tgactggaca caaatcgctt ctttcttatg cttccagttc
                                                                     3480
```

```
3540
etgtgggetg tectaegeet tgeagtgeeg ggteetgegg egaceaetga ggeeettegt
cetegecete agtecetteg teetegtett eggteteege titteeeagte ggeegggget
                                                                     3600
cgtcgtccac gaccccgcac gtgccgccta cgtcgccctg ccgattccgc cgcaggaggt
                                                                     3660
ggaactgtag tggtgccggc ggcttctccc ctggggcggc ggtggcgagg cgctcgctgg
                                                                     3720
eggegggeag eggetggatg aaataegeet eecceageag gtagaaggeg eegegeaege
                                                                     3780
cctcgcagag gctgagggcg gcagccgagc tgggatcgcc attcacggtg ccggagtaga
                                                                     3840
ageagtgege caggteggtt teeggaageg gegtetegga eeeggatttg egeeceaegt
                                                                     3900
tetggagegt gaageeggge gecaaaaage tgetgteggg eegeagetee agateeaget
                                                                     3960
getggteaaa ggegtgeagg eggaggegeg tggteeegtg teeeggggeg egeteeaget
                                                                     4020
ccggcaccac tagetecteg tectectegg aggggegeec gagtgegtee gacaeggeea
                                                                     4080
gtagegeege ggegageage ageagegtgg gtaegggeee aaageteega gaeeeeggag
                                                                     4140
cccgctccgc gttccccat
                                                                     4159
```

```
<210> 4909
<211> 1816
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1817)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (8)...(1038)
<223> similar to gi5565866 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4909
tcgtggaatt aacattgctg ccatcactga atcagacaag ttcttcatca acggctccaa
                                                                       60
ctgggaatgc atcctggggc tggcctatgc tgagattgcc aggcctgacg actccctgga
                                                                      120
geetttettt gaetetetgg taaageagae eeaegtteee aacetettet eeetgeaget
                                                                      180
ttgtggtgct ggcttccccc tcaaccagtc tgaagtgctg gcctctgtcg gagggagcat
                                                                      240
gatcattgga ggtatcgacc actcgctgta cacaggcagt ctctggtata cacccatccg
                                                                      300
gcgggagtgg tattatgagg tcatcattgt gcgggtggag atcaatggac aggatctgaa
                                                                      360
aatggactgc aaggagtaca actatgacaa gagcattgtg gacagtggca ccaccaacct
                                                                      420
tcgtttgccc aagaaagtgt ttgaagctgc agtcaaatcc atcaaggcag cctcctccac
                                                                      480
ggagaagttc'cctgatggtt tctggctagg agagcagctg gtgtgctggc aagcaggcac
                                                                      540
caccccttgg aacattttcc cagtcatctc actctaccta atgggtgagg ttaccaacca
                                                                      600
gteetteege ateaceatee tteegeagea atacetgegg ceagtggaag atgtggeeae
                                                                      660.
gtcccaagac gactgttaca agtttgccat ctcacagtca tccacgggca ctgttatggg
                                                                      720
agctgttatc atggagggct tctacgttgt ctttgatcgg gcccgaaaac gaattggctt
                                                                      780
tgctgtcagc gcttgccatg tgcacgatga gttcaggacg gcagcggcgg aaggcccttt
                                                                      840
tgtcaccttg gacatggaag actgtggcta caacattcca cagacagatg agtcaacct
                                                                      900
catgaccata geetatgtea tggetgeeat etgegeeete tteatgetge caetetgeet
                                                                      960
catggtgtgt cagtggcgct gcctccgctg cctgcgccag cagcatgatg actttgctga
                                                                     1020
tgacatetee etgetgaagt gaggaggeee atgggeagaa gatagagatt eeeetggace
                                                                     1080
acacctccgt ggttcacttt ggtcacaagt aggagacaca gatggcacct gtggccagag
                                                                     1140
cacctcagga ccctccccac ccaccaaatg cctctgcctt gatggagaag gaaaaggctg
                                                                     1200
```

```
gcaaggtggg ttccagggac tgtacctgta ggaaacagaa aagagaagaa agaagcactc
                                                                     1260
tgctggcggg aatactcttg gtcacctcaa atttaagtcg ggaaattctq ctgcttgaaa
                                                                     1320
cttcagccct gaacctttgt ccaccattcc tttaaattct ccaacccaaa gtattcttct
                                                                     1380
tttcttagtt tcagaagtac tggcatcaca cgcaggttac cttggcgtgt gtccctgtgg
                                                                     1440
taccctggca gagaagagac caagcttgtt tccctgctgg ccaaagtcag taggagagga
                                                                     1500
tgcacagttt gctattttgc ttttaggagg acaggggact gttattaaac aaggccttaa
                                                                     1560
cattgggtgg caaagatttg ccttntttgg attttaaaaa aaaaaactag attgactatt
                                                                     1620
tatacaaatg ggggcggctg gaaagaggag aaggagaggg agtacaaaga cagggaatag
                                                                     1680
tgggatcaaa gctagggaaa ggcagaaaca caaccactca ccagtcctta gtttttggac
                                                                     1740
ettettetee caaggitage ettecettet teaggaagni ggggtgtitg tittteatig
                                                                    1800
ttttttttt tctatt
                                                                     1816
```

```
<210> 4910
<211> 560
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (561)...(394)
<223> similar to gill84157 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4910
tttttttttg gaagttatga aagaggcttt taatgaaaat actgtacagt ttatgtgagg
                                                                60
caaaggcagg gggccttgtc caggaaggga agaggcccaa gaggcttcct gtccccttgg
                                                               120
gggcagcaga gccaaatget tgggctcggg cccaagetge etgecetgca ggggtccagg
                                                               180
gaggteetga tgagteetge ecetteeett ecagagggee tgeetggeag ecageageag
                                                               240
ggtgtttggg gagcacctgt tcccacaca gggtcctttt agtccattcc aacaggtgac
                                                               300
teegageage cetgaagget tggggaggge teetgeetgg caagtgggee tggcacgagt
                                                               360
agagggcaga ggcccgccct gggtgaggaa catcatagcc aggcgccgcc gccgtgcgag
                                                               420
tagetgtget cetggeegge gaegaageee egeageaget eggeeteace eccaaacace
                                                               480
540
cctgaggagt ccagactgtc
                                                               560
```

```
<210> 4911
<211> 1468
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1188)...(779)
<223> similar to gi458726 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4911
ttttttttt tttgcactca tagttacagt ttattacagt gaaaggatac agattaaaat
                                                                       60
cagcaatgaa gaaaggcaca taaggtaagg tccaagagaa cttccaatta tcctctcctg
                                                                      120
gcagagtett caggataatg ettaattete ccagcaatga tgtgtggeta caatgatgtg
                                                                      180
tgcacagagt attaccaacc.agagtagetc acceatgeet aggtgtecag ggettttact
                                                                      240
agggattgat cacattggca tgcttcactg cccacatggc taacttagtc tcctcagctt
                                                                      300
gaccttgcaa ggtcaagctg atactgcatg gcccaaggcc cacaggtaaa caaaaacact
                                                                      360
cttatcaggc aagatattct aatggcttag aggttatctc ccaggagcca ggcaggggcc
                                                                      420
tattetttat ttggaatgte cagggtteaa acateceaag tteateetgt ateacacaaa
                                                                      480
aggattaact tcaaaagtgg tattettgge caggtgtggt ggeteacace tgtaateeca
                                                                      540
gcaccttggg aggctgaggt gggaggactg cttgagacca ggaattcgac accagcctgg
                                                                      600
gcaacctagt gagatcccat ctctatcgta atttttctaa aaagtggtat tcttaagtca
                                                                      660
agttactacc ctgattgatg acagggagag agaccaggaa acccctgtgt tgtaatccct.
                                                                      720
taggaaacct tacaccttta cttgctttat tatcaggtaa tttccaggat gtaagccata
                                                                      780
cagccagaag gcagggtaca aaggagagga ggcagagatg gtacactcat acagaaqctt
                                                                      840
ctcctgattg tccactgaat agaaggcaag ctttccctcc tcaaggttca gccagatgcc
                                                                      900
caccacccca ggtctgtctg agccaaggac agtttccttg accatgtgcc atgcagagag
                                                                      960
ctggctagtc cccttccatt ccacacaaca agagtccata gtccttccca ggacctggtc
                                                                     1020
geggeteate teccaggaag ecaceecaae tgeccagtgg etgeaattee tagtgtecae
                                                                     1080
ttcccagtaa tgctttccag aagacagggc ctgggaacat aagacctggc tggtagaaaa
                                                                     1140
cctctcacag ctccagcgat agggttgtgg gcggtgagac acagtcactg tacgggaatc
                                                                     1200
cttggacacc tccaggctgc aggaaaggct cttcaagtta aaggttggat ggatggccc
                                                                     1260
tcagcaggtt taggaagagg cagttggcta tagttggtgg ccacagcaca gatgcagaaa
                                                                     1320
tacctcagca ggtttgggaa caggcagttg gctgtagttg gtggccacag cagagatgct
                                                                     1380
caaaggttgg cgggactctg agtgctcttg ggtctagagt ctcaacctgc tttgcctttg
                                                                     1440
ctcgtgccga attctgcagg cgggcaat
                                                                     1468
```

```
<210> 4912
<211> 2144
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1807)...(1484)
<223> similar to gi3947854 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4912
ttttttttt ttaaattaac cagatctgtc ttttaatagt taccagaatt tagatgttaa
                                                                      . 60
ttccccagag gaaaaatgtc catggcacag tttttctgga aaagttcaca tgtagacagt
                                                                      120
gaagettetg aagttaggeg teaaattagt agtgacaate tttttttaa tettgaaagt
                                                                      180
ccctagtttt aaagaaagta gaatccatct ggggcatgtc tgcatcacag ggtatcactc
                                                                      240
aagagtcatc atcaggccaa aaagactctg aagggaacca ggagggtttg gcccttgctg
                                                                      300
tggaaagatg ctactgaaag tataagagaa caccctaatg cacgcgtcag gcacgaaacc
                                                                      360
gtaccatgcc ccgctaagac atgggaccag agaacacgtc aacgtcaggc cgctccagga
                                                                      420
aaaccatcca caaagacaac agaagctaac ccgaggtcga cactgccatg aagagtgttg
                                                                      480
```

```
gctgaaaccg cagttaccag tgtctttact ggacgcgaac atccctaagg acacggctgt
                                                                    540
getgetteet aageataegt gaccaegata etgtetttee eegggtetee ttagegeeat
                                                                    600
cactgoacca ggcccagcat gcctcaagtc ctccagagcc ttctcctgag acagcactag
                                                                    660
                                                                    720
gggccacgtc agaccccagg ctgcagccct tcaccgtgcc cgtccccggt ccggtctgcc
ctgctggggc cggtgggtat catggggacc cctgtgtaga cacggacacc ggagagcgtg
                                                                    780
ggacaggagg cgtctcagag ctccccaccc acacactcaa gggtcagcgt cactcatgtt
                                                                    840
                                                                    900
teettetgtt eccatggtge etecaaaagg gttteeaaac aaagteatea ttgattaeee
tggagtatgt caataagcca aacaccagca gccagatacc accaagctag tcaccacttt
                                                                    960
aaaagaagat gagctggaga acgaagcagc cctctgatgg acccagtcag tgcagtcggg
                                                                   1020
                                                                  1080
actcagggag acacccgggg acccctgccc agctccctgc cggaggaaag actagggaag
1140
tctgggagca ggccgagaaa ctctgttgag ctgctaaaga attcttcatt ctcatgtgat
                                                                   1200
tttcttcatt tctgtcttcc cagttactac caaggagcta aggaaagttc aggaatactt
                                                                   1260
tgtttagtgt cgccataaca tctccaacca tgcattaagt ttaaccaaaa gctgcaatat
                                                                   1320
tccagattct taaattctca atggcaacca atttatgctc aagttgaaaa tctggcaagc
                                                                   1380
accytacycc ttcaycacac ycytyyytcc yyattttccc atcacacac cyctctccc
                                                                   1440
cgtccaaggt gcctgtttac ttctggtctg cgcgggctca ggtttcaaag agcttgctga
                                                                   1500
aggeggeece caceteggeg atcatgtegg aggtggtggt ggagegaeeg tgettetgga
                                                                   1560
aggettggtg gttgeactge etggtgagag ageaggegee aaaegeggee aecaggagag
                                                                   1620
ggctggacec atttgttttc tgtggtccag caaggagege ccagtgtacc aggaegecca
                                                                   1680
gggagcccga caggaggtcc ccttgccctc cacacctgcg gctgctgcct tcctggctgc
                                                                   1740
acacaagcac etgetggeeg ttggagagga tgtegegete teetttetgg accacegtea
                                                                  1800
cgttgcccag ggcttggctg agtcttagca cagatccatg gctgtcatcg ctgtccatag
                                                                  1860
ggcctctgag ctatgacaac acaggaagac agagaaaaag caaagtcttc ctcagacaca
                                                                  1920
cgacgacaga tagccctgtc ccatccgcca tgagactcat gctctcgtgt ctaaagggat
                                                                  1980
cacccaggca cctgttaaag gccatgtagg tgggaggatg cccaggatat cacctgcagt
                                                                  2040
gagtectecg ageaggtget gaeacggtge etgetecagt geceatecte taceteatea
                                                                  2100
gagcaggctg aaggagggaa ttccaccacg ctggactaaa agaa
                                                                  2144
```

```
<210> 4913
<211> 2834
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(2504)
<223> similar to gil632819 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4913
ggcacgagag cagcaacggg cagatgtttc acgcccactg gttctgcgct gggacagaca
                                                                       60
cagtcctcgg ggccacgtcg gaccctctgg agctgttctt ggtggatgaa tgtgaggaca
                                                                      120
tgcagctttc atatatccac agcaaagtga aagtcatcta caaagccccc tccgaaaact
                                                                      180
gggccatgga gggaggcatg gatcccgagt ccctgctgga gggggacgac gggaagacct
                                                                      240
acttetacca getgtggtat gateaagaet acgegagatt egagteeeet eeaaaaacce
                                                                      300
agccaacaga ggacaacaag ttcaaattct gtgtgagctg tgcccgtctg gctgagatga
                                                                      360
ggcaaaaaga aatccccagg gtcctggagc agctcgagga cctggatagc cgggtcctct
                                                                      420
actactcage caccaagaac ggcatcctgt accgagttgg tgatggtgtg tacctgcccc
                                                                      480
ctgaggcctt cacgttcaac atcaagctgt ccagtcccgt gaaacgccca cggaaggagc
                                                                      540
```

```
600
ccgtggatga ggacctgtac ccagagcact accggaaata ctccgactac atcaaaggca
gcaacctgga tgcccctgag ccctaccgaa ttggccggat caaagagatc ttctgtccca
                                                                      660
                                                                      720
aqaaqaqcaa cggcaggccc aatgagactg acatcaaaat ccgggtcaac aagttctaca
                                                                      780
ggcctgagaa cacccacaag tccactccag cgagctacca cgcagacatc aacctgctct
                                                                      840
actggagcga cgaggaggcc gtggtggact tcaaggctgt gcagggccgc tgcaccgtgg
                                                                      900
agtatgggga ggacctgccc gagtgcgtcc aggtgtactc catgggcggc cccaaccgct
tctacttcct cgaggcctat aatgcaaaga gcaaaagctt tgaagatcct cccaaccatg
                                                                      960
                                                                     1020
cccgtagccc tggaaacaaa gggaagggca agggaaaagg gaagggcaag cccaagtccc
aageetgtga geegagegag eeagagatag agateaaget geecaagetg eggaceetgg
                                                                     1080
atgtgttttc tggctgcggg gggttgtcgg agggattcca ccaagcaggc atctctgaca
                                                                     1140
                                                                     1200
cgctgtgggc catcgagatg tgggaccctg cggcccaggc gttccggctg aacaaccccg
                                                                     1260
gctccacagt gttcacagag gactgcaaca tcctgctgaa gctggtcatg gctggggaga
                                                                     1320
ccaccaactc ccgcggccag cggctgcccc agaagggaga cgtggagatg ctgtgcggcg
                                                                     1380
ggccgcctg ccagggcttc agcggcatga accgcttcaa ttcgcgcacc tactccaagt
tcaaaaactc tctggtggtt tccttcctca gctactgcga ctactaccgg ccccggttct
                                                                     1440
                                                                     1500
tcctcctgga gaatgtcagg aactttgtct ccttcaagcg ctccatggtc ctgaagctca
                                                                     1560
coctocqctg cotggtocgc atgggotate agtgcacctt cggcgtgctg caggccggtc
agtacggcgt ggcccagact aggaggcggg ccatcatcct ggccgcggcc cctggagaga
                                                                     1620
ageteeetet gtteeeggag eeactgeacg tgtttgetee eegggeetge eagetgageg
                                                                     1680
tggtggtgga tgacaagaag tttgtgagca acataaccag gttgagctcg ggtcctttcc
                                                                     1740
                                                                     1800
ggaccatcac ggtgcgagac acgatgtccg acctgccgga ggtgcggaat ggagcctcgg
                                                                     1860
cactggagat ctcctacaac ggggagcctc agtcctggtt ccagaggcag ctccggggcg
cacagtacca gcccatcctc agggaccaca tctgtaagga catgagtgca ttggtggctg
                                                                     1920
cccgcatgcg gcacatcccc ttggccccag ggtcagactg gcgcgatctg cccaacatcg
                                                                     1980
                                                                     2040
aggtgcggct ctcagacggc accatggcca ggaagctgcg gtatacccac catgacagga
                                                                     2100
agaacggccg cagcagetet ggggccetec gtggggtetg etectgcgtg gaagecggca
                                                                     2160
aageetgega cecegeagee aggeagttea acaceeteat cecetggtge etgeceeaca
                                                                     2220
ccgggaaccg gcacaaccac tgggctggcc tctatggaag gctcgagtgg gacggcttct
                                                                     2280
teageacaac egteaceaac ecegageeca tgggcaagea gggcegegtg etecacecag
                                                                     2340
ageageaceg tgtggtgage gtgegggagt gtgeeggete ceagggette cetgaeacet
                                                                     2400
accggetett eggeaacate etggacaage accggeaggt gggeaatgee gtgecacege
                                                                     2460
ccctggccaa agccattggc ttggagatca agctttgtat gttggccaaa gcccgagaga
                                                                     2520
gtgcctcagc taaaataaag gaggaggaag ctgctaagga ctagttctgc cctcccgtca
                                                                     2580
cccctqtttc tqgcaccagg aatccccaac atgcactgat gttgtgtttt taacatgtca
atctgtccgt tcacatgtgt ggtacatggt gtttgtggcc ttggctgaca tgaagctgtt
                                                                     2640
                                                                     2700
gtgtgaggtt cgcttatcaa ctaatgattt agtgatcaaa ttgtgcagta ctttgtgcat
                                                                     2760
tctggatttt aaaagttttt tattatgcat tatatcaaat ctaccactgt atgagtggaa
                                                                     2820
attaagactt tatgtagttt ttatatgttg taatatttct tcaaataaat ctctcctata
                                                                     2834
aaccaaaaaa aaaa
```

```
<211> 1602
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(595)
<223> similar to gi3874039 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<210> 4914

```
<400> 4914
ctgcagaagt ggagtttgga gtatatccag gagatcgctg gctgccgaac tgtcccagtg
                                                                     60
                                                                    120
gaagttggtt cgaggtacac agatgaggaa tggtcccaga ccctcatgac ggtcaacgag
ttcatcagca aatacatcgt gaatgagcca agggacgtcg ggtaccttgc tcagcaccag
                                                                    180
etetttgace agateeegga gttgaageag gacateagea teeeegaeta etgeageetg
                                                                    240
ggcgatgggg aggaggaga aatcaccatc aatgcctggt ttggtcccca gggaaccatc
                                                                    300
tececactae ateaggatee ecageaaaae tteetagtge aggtgatggg gaggaagtae
                                                                    360
atcoggotgt attoccogca ggagtcaggg getetgtace etcatgacae geacettete
                                                                    420
cataacacga gccaggttga cgtggagaat cccgacctgg aaaagttccc caagtttgcc
                                                                    480
                                                                    540
aaggeeecat teetgteetg cateetgtet eetggagaga teetgtteat eeeggtgaaa
                                                                    600
tactggeatt acgtgcgggc tetggatttg agettetegg teagettetg gtggtcgtag
                                                                    660
ccaggatagg agctgaaagg gcctgacatg cagacagcat tcatctgttc actaatttcc
tgggtcctgg aatctataga gacaagcagg actgaacctg tgtcctgaag agccttcact
                                                                    720
geccagtgge agecetgggg ggetgagete cageactgga caggeacaga geaggggetg
                                                                    780
cccaggaagg agcacactcc aggccagggg tgcatggcag aggaaggtgg ggagagccca
                                                                    840
                                                                    900
gaaggacatt gcagacagac agcctgcatg gggactctgg catcagaaag ccgaatgttt
ttgggaaacg ggtgggtcac acaggcaggg gtgaaacatg ggctctgagg ttggctacct
                                                                    960
gattcaaacc cggccgcgct gcgcacctgc tgggtgactt ggccaggatc ccccacttcg
                                                                   1020
ctgtgcccat atggaaaaga gggcaaggcc agtcctcact gccgagggcc gagaaggcgg
                                                                   1080
tgecgagece etgetgetge atgaacetta geegetgtea etgateeeaa ttaetetgat
                                                                   1140
cettttgccc ttccttccca taacggcctg ctggacgcca cagcctgaat actggagaga
                                                                   1200
gctgggcatt gcccaggtca caggagagag tccgtagaga cctgcgcagg agccgggacc
                                                                   1260
cctgctgagc agtgggagct ttctgtcatc cccatggctc aaggataacc tacctgcctg
                                                                   1320
cagagaagtg cgaaggtctt gctggatgac ttttcacccg cactcaccca ggagcaggct
                                                                   1380
cccaagtgaa gaaaccacca aaccatcacc agctcctaga agcctccctc ccaccacctt
                                                                   1440
ctagtcacca tcccccagaa gtaatgactc tcaaacctgg gggatttgag gccaggggga
                                                                   1500
gagccagget ctatgettte tgtaattgtg tetegtttgt gtgcacgcag gtttgtttta
                                                                   1560
                                                                   1602
```

```
<210> 4915
<211> 2671
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (308)...(1500)
<223> similar to gi2047349 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4915
cgcacggaaa gtttggaggc ttagcaagga gggtggtgcc ggcctccgcc cggtggtggc
                                                                       60
agaactgcct gtgcgagcac ggcttccacg tgggctgcgc cgccgggcgt catgtcgggc
                                                                      120
ctaagagaca cgctctacag ctgtgaaatc tgaagttcag gtttgcattt ccttactgct
                                                                      180
ttgtcttgaa gacagaacga tgccaaagaa agcaaagcct acagggagtg ggaaggaaga
                                                                      240
ggggccggct ccctgtaagc agatgaagtt agaagcagct ggggggcctt cagctttaaa
                                                                      300
ctttgacagt cccagtagtc tctttgaaag tttaatctcg cccatcaaga cagagacttt
                                                                      360
tttcaaggaa ttctgggagc agaagcccct tctcattcag agagatgacc ctgcactggc
                                                                      420
cacatactat gggtccctgt tcaagctaac agatctgaag agtctgtgca gccgggggat
                                                                      480
```

```
540
gtactatqqa agagatgtga atgtctgccg gtgtgtcaat gggaagaaga aggttttaaa
taaagatggc aaagcacact ttcttcagct gagaaaagat tttgatcaga aaagggcaac
                                                                      600
gattcagttt caccaacctc agagatttaa ggatgagctt tggaggatcc aggagaagct
                                                                      660
ggaatgttac tttggctcct tggttggctc gaatgtgtac ataactcccg caggatctca
                                                                      720
gggcctgccg ccccattatg atgatgtcga ggttttcatc ctgcagctgg agggagagaa
                                                                      780
acactggege etetaceace ceactgtgee eetggeacga gagtacageg tggaggeega
                                                                      840
ggaaaggatc ggcaggccgg tgcatgagtt tatgctgaag ccgggtgatt tgttgtactt
                                                                      900
teccagagga accatteate aageggaeae teetgegggg etggeeeaet egaeteaegt
                                                                      960
gaccatcage acctaccaga acaattcatg gggagattte ettttggata ecateteggg
                                                                     1020
gettgtattt gatactgcaa aggaagacgt ggagttacgg accggcatac cccggcagct
                                                                     1080
gctcctgcag gtggaatcca caactgttgc tacaagacga ttaagtggct tcctgaggac
                                                                     1140
acttgcagac cggctggagg gcaccaaaga actgctttcc tcagacatga agaaggattt
                                                                     1200
tattatgcac agactecece ettactetge gggagatggg geagagetgt caacaceagg
                                                                     1260
tggaaagtta ccgaggctgg acagtgtagt gagactgcag tttaaagacc acattgtcct
                                                                     1320
cacagtactg ccggatcaag atcaatctga tgaaactcaa gaaaagatgg tgtacatcta
                                                                     1380
tcattcctta aagaatagta gagagacaca catgatggga aatgaggagg aaacagagtt
                                                                     1440
teatggactt egetteeett tgteacattt ggatgeactg aageaaattt ggaataqtee
                                                                     1500
agetatttet gteaaggace tgaaacttae tacagatgag gaaaaggaaa geetggtatt
                                                                     1560
atccctctgg acagaatgtt taattcaagt agtctagtgc ctttgcagaa tcaaatgcct
                                                                     1620
actattttat atgcatatat taaaagaaaa gcaaagacct gagccgagga gaggatgaat
                                                                     1680
tcaagtttcc ttacctgcgt atctactaac aaacatgaga cctccctgtt acaggtggtc
                                                                     1740
agttggccaa atgtactaac gggcacatga aagaaagaac agcaaattac caagtgtctc
                                                                     1800
agaaaatgac aaaaccatat tttgacaagt ttatttaatc cagtgtggta gaaaaggcac
                                                                     1860
aattocaatg tatoatttaa aattgaatgt cattaacotg gotttgttot ttggaagaaa
                                                                     1920
caacttettt aaagagette tttggeteta gaaaaattte aaacaattaa aataagaaaa
                                                                     1980
aattttaaac tggtttttta taatgaaaat atacatacct ttgtgtatag acaagcccat
                                                                     2040
gcccattaaa ataaagttat cctgtaacat aaattttatt aaataatact tccccacaga
                                                                     2100
tgagaggcac gcaacaccta tggacaaaag ggagttacag aggctgctta aaagatggag
                                                                     2160
aaaagcctga gattgaagga ggaaaaaaac ccagtattta aagtctataa aaaatactca
                                                                     2220
aaatagtggg gtcctccgag tttaaaataq tccattqqtt atttttacat tctaaaqtqc
                                                                     2280
catgtaggtt gatatttttt aaaatatcat tggagaattt aatcctttcc tttataaaaa
                                                                     2340
tagagcattt ttcctgcctt tcctggcaaa agttggggat aaaaggaaaa aaagttgtca
                                                                     2400
aaatgtaatt ttcagtccca attcacccag gaaaacatgc ttgtgaattg tgcagtaaaa
                                                                     2460
ggtggtaatg actactggaa gctaagtcaa agggtgattt cccacctgaa ttttacttac
                                                                     2520
ttaaataaaa gttacttaca atgggagtga aaaactgagg tttctgttat ttagtagaga
                                                                     2580
aatcaactcc acgtttactt aaagagatgg taaggtcaag gttcaaatgc tactgtgttt
                                                                     2640
taatttggat atttgaaatt tctcttgagg c
                                                                     2671
```

```
<210> 4916
<211> 1841
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (129)...(698)
<223> similar to gi4240317 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4916

```
ggagtacacc tgcggtactc cttccggaat tcacgggtcg acgatttcgt gcgaagaaat
                                                                       60
cattgtttaa tgccccgcac attttatatt tgtgacgact agacaatttc tctggtttct
                                                                      120
tggttgaggt gaccaaggaa gaaaggcaca ttgttaaacc tctctatgat agatacaggc
                                                                      180
ttgtaaaaca aatgctgaca agagctagca tcactcctgt ccttggatct ccatccacca
                                                                      240
agcgaagggg tcagatgtta cagccaatca tagaaggaga aactgcacat ttttttgaag
                                                                      300
aaatcaagga ggaagaagaa gatggtgtta atctgtcctc tgagttaggt gatatgttga
                                                                      360
aaactgcagt acaggtacag tetteattaa aaaactetga atetgatgtt gaagaaaate
                                                                      420
aagaaaaact ggctctggat ctccgattgt caagttctcg agcagcttct atgcctgaat
                                                                      480
tattggaaca actttggaaa gccagagctg aaaaaaagaa actacgcaaa acgttgcggg
                                                                      540
aatttgaaga agcattttat caacaaaatg gaaggaatgc ccagaaagag gatcgtgttc
                                                                      600
cagtgettga ggagtacaga gagtacaaga aaattaaage caagettagg ettettgaag
                                                                      660
ttcttataag caaacaagat tcttcaaaat ccatataaga tacgttcctt gaaaattcat
                                                                      720
atcataaagt cagttgtatt cettgaaget atcategtgt gtaettgget ggtaettaaa
                                                                      780
ttegttttgt caggeactea gagaatetea ttttgtaett ggttgtggtg ceaetaaaca
                                                                      840
aaacaaatga tgggagagta agtaggccct ctcaagggag cgtaagtgat gttccatatt
                                                                      900
aaccacagac tgtcctctcc acctttagca aacatatggt ttacttcatt gttttgtact
                                                                      960
acagatacat ccttttagca aaagactgga attttatcct ttcaacttca agaactttgg
                                                                     1020
aaatgcaagc tttttgttat taccaacttt ttgtttctca ttactgaaga aaattggagg
                                                                     1080
aaaatcttca tactgaattc ttctgttgcc tttttcttac agaatgactg aaaatttgaa
                                                                     1140
agaaaagcct ataaaagggc acatacgcaa ctgtgttctc tgttttccta gaaaaccaaa
                                                                     1200
atcaaactga gatttcaagt cgtactatgg aacacctttc tgtttaattc ccaaagtgac
                                                                     1260
atotteteae aggtagtatg ttagtaaaat tttgcaatte getggteaea cageteeegg
                                                                     1320
atgaagataa cagttggtag accaaaaggt gacctcgctt agtatattga aaacacacac
                                                                     1380
cacacatcac acacagaact gaatcatacc acgtgctgcc tatgggactt cagttactgt
                                                                     1440
ttcctgagtt actgtttatc cgctggcaat ggtgtgattt gtctggatca gatccgtgct
                                                                     1500
attocccaac ccacctccag ataatgtgag aaaatagcca tgtcagtatg taggaactct
                                                                     1560
gatggtgctc agatttgtgt gttcaatcaa tgggcttaaa tcagcaaaat attatgccta
                                                                     1620
aagtaaatct gttcttaaca agggctctac cactgcattt tcacatgtac cttcaggggg
                                                                     1680
ttatcttttt ttttttcccc tcctatttta atcagcaaaa tccttaccaa aacaacgaca
                                                                     1740
acaacgcctt tttaaggaac cacccttggt gcaatattaa catgctgtta aaagcacttg
                                                                     1800
tttacaggat gggtaagggg ttgcccctgg ttttatactt t
                                                                     1841
```

```
<210> 4917
<211> 1307
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1159)...(440)

<223> similar to gi5106787 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
tctcttctca aatggttcag cattcccaat caaaaagtgg tgtgtggtaa cctaggtatt ·
                                                                      420
gtgcttgttg agccatttaa ttttcctcac cttccgattc ggattcttct tctgcatttt
                                                                      480
gtaaccactc aacaaatttc ttcatctggt caagaaaaac acttttgcct ttagcaacat
                                                                      540
gtgetteett ataccattte agtattgett ettegeteag aacateaget ttataaaaga
                                                                      600
gaaccacaat cttctgaaag gctttcatga aatggatgtt gtcgtagcag tattcctgaa
                                                                      660
cettetggag gaggateage tetgaetgge ettgggaget gaacaeggee ageaggggag
                                                                      720
catattgctt caggtgcttc agagcctgct ctgcaacaag ttcttccttc ttgttccact
                                                                      780
caacagcgtt cattatacat gtccacagaa gaccaatcac tgctgtttct ggaagatcat
                                                                      840
tectetteat ttettetttg acataaagea ceaceteett gategggeat teetgagaaa
                                                                      900
gacgetectg gagetectte tgeagtteet teetggtgee cagggactge tggactegga
                                                                      960
ggaagtegga aageteetta agaeetgegt eagtgaagta titageaaaa tgateeacae
                                                                     1020
tetgtetgtt aactggaaag agtteaagea geetettgte taagttgget ttteteaaag
                                                                     1080
acgaggtaac agagttggca tetttttetg ceatecatge tttgaaaage ttgaéageaa
                                                                     1140
atgaggccgc aatgcctgtt gaaaaacaaa agagaatttc attcctttta cgagcaaaac
                                                                     1200
caattgtgat ggtgtgcaaa gcaaccaggt ttcctgaaat gtgtaaataa ctaaaagact
                                                                     1260
aattttggta caaatgaaaa gtcaatagac ctctaggcaa attctcc
                                                                     1307
```

```
<210> 4918
<211> 2550
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(848)
<223> similar to gi2529707 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4918
agtetacate ggeteettet ggteecacee ceteeteate cetgacaace ggaagetett
                                                                    60
tgaggctgag gaacaggacc tattcaggga catccagagt ctgccccgaa atgctgccct
                                                                   120
gcgcaagctc aacgacctca tcaaaagggc caggctggcc aaggtccacg cctacatcat
                                                                   180
cagetetetg aagaaggaga tgeeeteggt gttegggaag gacaacaaga agaaggaget
                                                                   240
ggtcaacaac ctggccgaga tctatggccg gatcgagcgg gagcaccaga tctcacctgg
                                                                   300
ggacttcccc aatctgaaga ggatgcagga ccagctgcag gcccaggact ttagcaagtt
                                                                   360
ccagccgctg aagagcaagc tgctggaggt agtggacgac atgctggccc atgacattgc
                                                                   420
ccagctcatg gtgctagtgc gccaggagga gtcacagcgg cccatccaga tggtgaaggg
                                                                   480
cggagcgttc gagggcaccc tgcacggccc ctttgggcat ggctatgggg agggggctgg
                                                                   540
agaaggtatc gatgatgctg agtgggtggt ggccagggac aagcccatgt acgacgagat
                                                                   600
cttctacacc ctgtcaccgg tggatggcaa gatcacaggc gctaatgcca agaaggagat
                                                                   660
ggtgcgctcc aagctgccca acagtgtgct gggcaagatc tggaagctgg ccgacattga
                                                                   720
caaggatggc atgetggacg acgacgagtt tgcactggcc aaccacctca tcaaagtcaa
                                                                   780
gctggagggg cacgagctgc ccaacgagct gcctgcccac ctcctgcccc cgtccaagag
                                                                   840
gaaagttgcc gagtgatggg gtggggggac attcagacgg gcagtgttag aggaggagat
                                                                   900
960
cacatatgca tatettgaca tigetetgta ggagagagag gaccatgacg cecacgtttg
                                                                  1020
cagctgatac ttgtttgggc acacctccaa gttctcggga ttagaaggac aagagcactc
                                                                  1080
ccaggececa gagtetaage etaagtetet ategetette eceteteete ggecaeteee
                                                                  1140
cagataccag acctgaggca attcacttgc cagcacagat ggccaaccca cctccagatt
                                                                  1200
ccccagtgct tccacacccg ggctctgagc aaatggaaaa gacttttcat ttagtagaca
                                                                  1260
```

```
atteacttet ttttetgtge tteccetate tgetttgget tectaataag aaateeatte
aagagctagg agatctgagg gcaggcgggc agctgcaggg aggagaggtg agaaaggaag
                                                                     1380
cgtcttctag agacattggc ccaggagctc tgttctttcc taatctaagc ctctgtcttc
                                                                     1440
ttcggcaaac cttgctttga actctgccag tatttcattt taaagaatcc cagagcggga
                                                                     1500
gagagaagag aaaaaaattg ataagagtga ggaaattgtc ctgtagtcta ttgaaaacca
                                                                     1560
gtcaaggtgg ttttagttca tagattttgt tagatgttct ttccacctgg cctatgatgt
                                                                     1620
ttagatgtte atacttgact cacatttace cageceetee tgegtaceag gagetgtgtt
                                                                     1680
aggcacttta tatacattat tctatgtggc cctcactgat gccccaggga agtatgcatt
                                                                     1740
agcetteeca ttttgeagtt gaggaggetg agtageetea gaagggttta ggegaeette
                                                                     1800
tgaaactcac agaagtcacg tgatggagag aggattcaaa gccagggcct cagaccctca
                                                                     1860
cacacttgtc tgtgctatga tgtatgcagg atcccagcat tgatacccaa tgacaaacta
                                                                     1920
tggagaacaa gcaaagtatg caggccccct gcagcctccc aggacaggct ggcaagggag
                                                                     1980
gagggccggc cagcatttgg tgggccatca gtctggccat ctgtcacgtc acaqaaqcaa
                                                                     2040
accgtgcctt ctggctctgc gccccatatt cccagcatca tagacatcca acagcaccag
                                                                     2100
caggagagtg ggctagcctg ctggatgctg ttcgtgcctg tccctgctct gcctcccacc
                                                                     2160
cagttgcctg aatcatccca gctcagatgc agccactgtc tcttgtcaag tgggacctca
                                                                     2220
tactattete agaaggetaa ettgagaggt ttggggeett gttéeceaga gggteeceag
                                                                     2280
ggactetgca gtgtccttgg caaateecca etgtacteaa tgecetacat tetettetgt
                                                                     2340
ggtctctccc ctggcttgct tcatggccac tgaaccaatc actttgtatg ctatgctcct
                                                                     2400
actgtgatgg aaaacaaaat gagtataact tattttatat ccatattcag actatataga
                                                                     2460
gaatatteta tgcatctatg acgtgcttac tactgcagtg catttgtcat tagtcttcat
                                                                     2520
gttaatacag tacatttatt aaattggtaa
                                                                     2550
```

```
<210> 4919
<211> 789
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (792)...(393)
<223> similar to gi1244515 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4919
 tttagcagtc tggatactgt atttctaata catttactct gacattcttt tgaggaatac
                                                                         60
 atggagaact gacaattggt tatgttagtt tacatgttcc cttgttctta ttacattaaa
                                                                        120
 cgtatctgta agaagggttt gcttagcatc cccagaaaaa aaaaaaaagt gttcacattc
                                                                        180
 tttaggtetg accegtggta aggagaggga ggattagaga acatetaeta etgaceatat
                                                                        240
 ggaagttttg gatgatataa attcagagat tcagaccagc tgaatcaaat taaaatgtac
                                                                        300
 atgtaaaaaa tgtgttagat aatgggaggc aggacagaga gagagccagg tgagtgggga
                                                                        360
 gtcacgctga ggcaggacac agaggcaatc agactagcat gtggcgtttc ctatggaggg
                                                                        420
 caagatggtc agaacgggag aagctgcggt cacagtccgg gcactggaaa ggtttgattc
                                                                        480
 cagtatgttt teggaaatgt ettgttagtt cateagaceg ageaaactte catgtgeace
                                                                        540
 cttcccatgt acatttgtag ggtttttctc ctgtgtgtgt tcttctgtgt gctttcaagt
                                                                        600
. gggagetttt agtgtacaet ttgttgeate cateataate acatetgtgt atecteeget
                                                                        660
 teetttgagt atceggggat teeacaggta aaggtetett eecaggetge acgatgaceg
                                                                        720
 aagggtgatt ctcttgcaac aatgcttgcg ggggggacac tgagttcatt aaggggggtg
                                                                        780
 acatttctc
                                                                        789
```

```
<210> 4920
     <211> 648
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (15)...(552)
     <223> similar to gi4760400 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 4920
tggaactgaa cagtctattc aacaacaaat tgactgacgg ctgtgcacac tccatggcta
                                                                       60
ageteettge atgeaggeag aacttettgg cattgagget ggggaataae tacateactg
                                                                      120
ccgcgggagc ccaagtgctg gccgaggggc tccgaggcaa cacctccttg cagttcctgg
                                                                      180
gattetgggg caacagagtg ggtgacgagg gggcccaggc cetggetgaa gcettgggtg
                                                                      240
atcaccagag cttgaggtgg ctcagcctgg tggggaacaa cattggcagt gtgggtgccc
                                                                      300
aagcettgge actgatgetg geaaagaacg teatgetaga agaactetge etggaggaga
                                                                      360
accateteca ggatgaaggt gtatgttete tegeagaagg aetgaagaaa aatteaagtt
                                                                      420
tgaaaatcct gaagttgtcc aataactgca tcacctacct aggggcagaa gccctcctgc
                                                                      480
aggcccttga aaggaatgac accatcctgg aagtctggct ccgagggaac actttctctc
                                                                      540
tagaggaggt tgacaagctc ggctgcaggg acaccagact cttgctttga agtctccggg
                                                                      600
aggatgttcg tctcagtttg tttgtgagca ggctgtgagt ttgggccc
                                                                      648
     <210> 4921
     <211> 1071
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(1072)
    <223> n = a,t,c or q
    <220>
    <221> misc feature
    <222> (1012)...(544)
    <223> similar to gi6013381 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
```

60

120

ttttttttt ttgcaaatta gaattctttt aatataaaaa aaagtactaa aatacccacg

tggttctgct gtgttatttg ccctaaagga agtgagggc agagtgaaga atcccagtgc

<400> 4921

```
ageteagtgg geceagaaat gggeetttee gtaggataag gegtgeeeae teeaeeteea
                                                                      180
ccagacttct atcccctctg ctgttcccag cccccaattc ctgcagcagg aaaccccagt
                                                                      240
ggtctggctt tggcactggg agtagaaggc acctgaaggg ctggctgggt gagtgaggac
                                                                      300
aggtgacctt taaaaacaaa acgacaccgt ggggtgggga agcaggtcat gcagctgtgg
                                                                      360
cagctggcag ggcccactcc tccatggcac aggtgggcat gggatggcca cttctccaga
                                                                      420
agtgaggaag cccagatccc aacagaatac tttctcaaaa ttgtttttgg tacaaaataa
                                                                      480
atggaaagaa gatatggggt ggggtgctgt ggaggccggg ccagccaccc tccccagacc
                                                                      540
ttagatcata gcgatgctct cgggggcaca gttgaggtgg gtggaggtgc tgctgctccc
                                                                      600
ggaggacttg caggcccggc caggggtagg ctgcagtgca gccaccagtg tgtctgagga
                                                                      660
gactgcccca aactcgtagc tgaaggtgcc atagaaaatg aggatatcga tgacacacac
                                                                      720
ccactcacac agggctgccc catgttgcag ctgagaactc tcatggacaa agaagactcc
                                                                      780
actgaggacc agggtgataa aggcgatgac agccagcaca cttcgcagat aggccacagc
                                                                      840
caggtccagc ggggcggtgg ccccttggta ggagagagca cagtgcaggc aaacaaagag
                                                                      900
cagccccgca gggaaggcca cgccagctcc aacgtagtgc agagacctgg catgatccac
                                                                      960
ctgaaagttg ccaaccacca agaggcccgc agcgttggtg cagcctgtga tagtccnnnn
                                                                     1020
nnttngcggc cgtactgcaa aatgggtttt catttggggg gaaccgctac g
                                                                     1071
```

```
<210> 4922
<211> 1738
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1718)...(1342)
<223> similar to gi4582465 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4922
ttttttttt ttggggagaa aattaaacct tatttattt taaaatcaaa ccactaggaa
                                                                       60
aatatatcac agcctggaaa cagcaaacgg acaggctata ttataatttc aagtaataag
                                                                      120
ttggtgaaaa ttcaacgaag ttgctatcaa aacaataagg tgccatgctg gggcaggaac
                                                                      180
actgccaget gcacaageee caggcaaaaa tggtatttgg taatggggge tgteteteet
                                                                      240
ttgctctaag ggagtcaget catcctagec caagttgett actttttete cettgaattt
                                                                      300
cctgttgcca ggggtttgtc tcaattgggc tctgttaatt cagggggcta agtaggcaat
                                                                      360
gctaggtgta ggctttcatt ccatatgttc taataaaacc aggttttccc aaatccagta
                                                                      420
cttcatttac tctgttgtaa tcaagtagcc aactgctcct cttttactgt tcattcctag
                                                                      480
atactagtat atatcacaat caaaaccccc ttctcttcaa ggggaaagtg ttactgcaag
                                                                      540
attgtcctgt cattttgtta cacacagcct caggggccat cagccagtaa ttctgcttcc
                                                                      600
cataattagt gtgtcatcac ctctcatgtt tctgcacagt ctccaggctg aaagatgcag
                                                                      660
catgtaataa ttttaagaaa tgtacatcca catcttgatg accagaaatg gggatccaca
                                                                      720
aggaacattt caaagttett atecaaacta gtetacetee cagttecaca tettaaaate
                                                                      780
aacttgtatg cccttgtata aattacccca aatcaagaaa acaaagaccc agaaaacttt
                                                                      840
ctttcccttc taagttagtg acctcattga ttttgtttca cagcttatgg aagatggtgg
                                                                      900
ggtgacactt ttggtaaaca ggatgttggc aacaaagaga aaatatctct cctcagactc
                                                                      960
caccaactct aacctgccag cctgttagta cctgtgtagt aagaagagtc tggtaccttg
                                                                     1020
gagggetetg gettgttaca ggggagagee ttactgecag gacaagcact ggccacagga
                                                                     1080
aataataago totaaaacto tootgtaata tototgacto gatttagoac cacttttto
                                                                     1140
catttcattt tttagggact gaaacataaa ataaccagtg tccagaggca agtgacatat
                                                                     1200
gccttacgct tgtggccatc cttcatttct tcattcgtaa actttgctta aaagactaaa
                                                                     1260
```

```
attcccaatt ccttataaaa aatatattct tgccctcagc cctgatggcc actggcaaat
                                                                     1320
acttttattt tecaattgat aagagageet eetteatett ettggteata gttgggatga
                                                                     1380
ggtgcatgtg gtcatccaca cacttggtca cacaactgtc cagctgctgc ttcacctgaa
                                                                     1440
gctccttact cccagcatct attgaatctt tggctttgtc gttgcaatgc atggtgcacc
                                                                     1500
.gggccaggcg gtcctggaac ttctccagct cactggtgac caaagcctgg gcttgagcca
                                                                     1560
gaggeacatg geagegeteg atgeactggt geacetgett eatggaggee tggetgteet
                                                                     1620
cacaacaget ggegetgeac eggaacatga gaecetgeat etteeggatg ttetetettt
                                                                     1680
ccagactett caccatggac tecacegeet cetgeaceeg gagetgetge ageteage
                                                                     1738
```

```
<210> 4923
<211> 1349
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(415)
<223> similar to gi2588610 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4923
cggttcgggg ctgtaccggg gacccacgcc aggtggccag tgcatctgga aacccaactc
                                                                       60
aatgeeecce gaccatgage gaaacttegg etteacceag tttgeettgg agetgaatga
                                                                      120
getgacagea gagetgaaac ggtegetgee ttecacegae aegagaetee ggeeagaeea
                                                                      180
gaggtacctg gaggagggga acatacaggc cgctgaggcc cagaagagaa ggatcgagca
                                                                      240
getgeagega gaeaggegea aagteatgga ggaaaacaae ategtaeaee aggetegett
                                                                      300
cttcaggcgg cagacggata gcagcgggaa agagtggtgg gtgaccaaca atacctactg
                                                                      360
gaggetgegg geegageeag getaegggaa catggatggg geegtgetet ggtageeetg
                                                                      420
gecceggggg caggaggete tggtteetea etecteetge etecacecee taccatggae
                                                                      480
acatgggtga ggccgggctc cccgcctcac tgcccttgag accaaagggg cagccctggc
                                                                      540
cetecetece etetgetgge cagagggtet geateteage ceacececaa ceceacegtt
                                                                      600
tggggtgaga agcagaatot gtgcttcccc agtctccttg ccccagacaa ccagcatgta
                                                                      660
agaccettee egetteacea tteegattee tgteeeettt ggggtaettg ggggagaete
                                                                      720
tggctcccag gatctgttcc ctatttcagt gccttcctag gacacagggg actccttgac
                                                                      780
getececagg etttetgtge ceaggeetet gtececageg gtgaggttge agtgagtgaa
                                                                      840
ggagaggagg tgatetgtte teceteceet tetgeceate tecageatet tetteceett
                                                                      900
ecctggeest geagggeett etceagetee etttggttag teeetggeea teeeteetgt
                                                                      960
cotggatoco ttotocotaa otgoaaaatg cotgoagott coagotoott ogtocotgat
                                                                     1020
cctcaagegg ttecctcccg tetcagetca geggatecce cagagtggag gaggeetete
                                                                     1080
catgaggagg ggagcagccc aaggcacctg teetetgacc caeeggcage gagtgegcag
                                                                     1140
gtgtgagtgt aagttcatgt aggagagtgt atgcgtgtgc gcctgtgccc tgcttgcagg
                                                                     1200
caagcaggge teectcatgt ageceggeet teeceetget gggggteeae cacategetg
                                                                     1260
ctetttetea eagtetgeet etgatgaggg egaattgeta tgacatteea ageteeaata
                                                                     1320
aagactgtcc cagactttga aaaaaaaa
                                                                     1349
```

```
<211> 1021
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1001)...(604)
<223> similar to gi3955266 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 4924 ttttttttt ttttaaaggt acaaatttat taaaactttg cagttaacaa ttattgaaga 60 aattagtatg ttaactataa aaacctagaa gtcccaggaa ttagatttca aaggatttgg 120 tttcaaagaa ttccttataa gtgattttaa ccattacatt ctttgttaaa ctgggacttt 180 ttctactttg gggattattt tgccccagct gtggccatgt ttaaaattag tcaggcaggc 240 acatgaagit gigggagaga igaigaggit cgcactetta tecaagiitti agcaaatagg 300 cactgtattt cccatttaat gggaatgcag tttcttctgc ggttctttgg cataaagagg 360 etctagacte eccatttett teacteaagg aagageeatt tgeattettg teetcacace 420 tgagtacttg tcacaagtta aaacactggc caaatcacca cctcaggact ccttgtatgc 480 attcagataa aaacgtetgg ggtgggggaa ggtgetttee etcagttett gttetéacae 540 atctgtcatt tagttggtca cagttgggca ggtagaagcg ggttaaaaagt tttaaaactc 600 ataataatcg tgtccagaga taaatgaagg ctgttgttaa caagcatgac agaaaagcct 660 ggaccagctg ttttctccaa aaagccagtg gaaagggggt cctgaagaag tgacaaaagc 720 cateceagee geeetgagee tgeageeagg egeggtgetg eeccatgage egegagetea 780 gcaaggccac caggcgctgg cagtcccggg cgacgtcgcc ctcctgctcc tttagccgcg 840 getggaagee ceaettette caeegggegg teaeeagegg ceetetetee ageagegtee 900 ctgcgaaggt cacgagcgtc accactaagc cccaggtggg gccggggctg tcggagagca 960 cggaatccgc catcagcgcc accagctcga agcggttccc ggggtagccg aggtagcgg 1020 1021

```
<210> 4925
<211> 1283
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (113)...(835)
<223> similar to gi4929321 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
    <400> 4925
    acagaggcaa cggctagggg agcggaggtt caagccacat gtctgcgtcc tcgggggcca 60
    gagcccgcca gcctcgcgg atcccggctc gcggccagcc cgagcggctc gggttttaaa 120
    aatcaatttg attggccaca ggaaacgtat tttggcatct ctgggagaca ggctgcacga 180
    cgatcccca cagaagccc ctcggtccat caccctcagg acaggagact ggggagaacc 240
    ttccattacc ttgcgacct cgaatgaagc cacagcctct acccggtac agtactggca 300
```

```
gcatcaccca gaaaagctta tettecagte gtgtgattac aaagettttt atttaggtte
                                                                      360
tatgctgata aaagagctta gggggacaga atcaacccaa gatgcttgtg caaaaatgcg
                                                                      420
ggctaactgt cagaagtcta cagagcaaat gaagaaggtc cctactatta ttctttctgt
                                                                      480
ctcatataaa ggagtcaaat ttattgatgc aacaaataag aacataattg ctgagcatga
                                                                      540
aattogtaat atotootgtg otgoocagga cocagaagac ototoaacat ttgootatat
                                                                      600
cacaaaagat ttgaagtcta atcaccacta ctgtcatgtg tttactgcct ttgatgtgaa
                                                                      660
tttagcctat gaaatcatcc taaccctggg acaggcattc gaagtcgctt accagctagc
                                                                      720
actacaagca agaaaagggg gacactcctc cacacttcca gaaagctttg aaaacaaacc
                                                                      780
etecaaacce atececaage ecegegitag cattegeaag teegigeaga tegacecate
                                                                      840
tgagcaaaag actctggcca atctaccgtg gattgtggag ccgggccaag aagccaagag
                                                                      900
gggcattaat accaagtatg aaaccacgat tttctgatac tcgccgtcct cctgtcctcg
                                                                      960
eggtgeettg etegecaage ggteeeggag eaggetttee ttegegeete egegteeace
                                                                     1020
cagcccagga ggaagactgc totgagogtg oggoottgtt acgggcgaaa ggccactggc
                                                                     1080
cattectggg gaagttettt etgeaceagt gatggaaaac geaagaettt eeagtegeaa
                                                                     1140
cccctgagag gcgtgagttg agatgggttt tccctgatgc tcccgactcc cctccccacc
                                                                     1200
acctaccaag gtatttctga tgactccgcc ccagtacttg ctttgcttca tttggggaaa
                                                                     1260
ataatacctt ttctttaaaa aaa
                                                                     1283
```

```
<210> 4926
<211> 972
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (112)...(496)
<223> similar to gi407097 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4926
cgctctctcc tgagcataaa ctcctcacca cattcacctt ggtacccact gctgcttaca
                                                                       60
tggctcctgc tccgtgggaa cgtcccgcag atgttttcct aaccaaggtg ctttcccgtt
                                                                      120
gcagategtg gcaggttgat eggeggettg cetgaegtgg tgaecateat ggaagggaag
                                                                      180
accttgaatc tgacctgcac ggtgtttgga aaccctgacc ccgaagtgat ttggttcaag
                                                                      240
aacgaccagg acatccagct cagcgagcac ttctcggtga aggttggagca ggccaagtac
                                                                      300
gtcagcatga ccatcaaagg cgtgacctcc gaggactcgg gcaagtacag catcaacatc
                                                                      360
aagaataagt atggcgggga gaagatcgac gtgacagtga gcgtgtacaa acacggggag
                                                                     420
aagateeegg acatggeeee geeecageaa geeaageeea ageteateee egegtetgee
                                                                      480
tcagcggcag gccagtgaag gcgttttcct agcctggaga tgggaaaata tgcttggcag
                                                                      540
agacaggaat gctgtgtgct tgttccaaat gagcagctgg catccgagtg gtgtcctgtg
                                                                      600
tgggctgata gttgatcaca cattgtgctt ttgatttttg catttggtga tgaatatttt
                                                                      660
atacccgtct aagggagaaa gctaatgttt tccacaagac tgaacaacgt gtatttacac
                                                                      720
gagggtagac ggcagatgcc tgacagagag tgggttggca gacaacacac tagcattttc
                                                                      780
acgggtgtgg gcacatgggt gtggcacctg gacgtgtgca gcatgtggcg gtctgtgtga
                                                                      840
agccaccgtg cttctctttg gggggccgcg agatctagca tctctgaaat cctggctgtc
                                                                      900
gaggetttga ageatgtgtt acctggttaa gettgtttte tettgettta ggeaaataaa
                                                                      960
agtttaaaaa tc
                                                                      972
```

```
<210> 4927
<211> 2002
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(137)
<223> similar to gi3228374 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4927
gtegacaaag cettecatga cetegttaga gtaattagge aacagattee ggaaaaaage
                                                                       60
cagaagaaga agaagaaaac caaatggcgg ggagaccggg ccacaggcac ccacaaactg
                                                                      120
caatgtgtga tettgtgaca ggeetgagge eetgggeaca gtgaeggtgg eetggeeage
                                                                      180
cetegggace cetececace taactgeact gaaaccattt ctaaccacaa ceettggece
                                                                      240
aaggacttgg tacaggaagg gagaagggca ggtgggcagg gagcagacag ggtctggctt
                                                                      300
tgcccagagg gcacgggctt tcccacctct caaagagaca aggaagccac ctgtaagcaq
                                                                      360
aagcagcatc caagtgcccc tggccccccc atgtgttgat tcaacccggt tcctcccct
                                                                      420
ctctcggtgg gtgtgttgtt tattgtaact acatagtgtt ggtttgatgt ggaagtgttt
                                                                      480
atccacatac aaagtacaaa acaagccatg aacaagcttc tttcccttac cccccatcca
                                                                      540
caatgtctga gcttgggatg tcttttatag atttttaaat tattttagtg attattattt
                                                                      600 %
tattaaaggg gtctgggctc actgcctggt gaagtttcaa gtgttcagca gacctctctg
                                                                      660
gtaacatatc tggaatattg ttgttgtttt ttaaccgagt tttcccatca gtgccaaaag
                                                                      720
tctactcaat ctgaaagtag agtgtctgag aggacagaag gtaatgggaa ctgtagctgg
                                                                      780
aggcctcagg ccatgggtca aacctgggag ggaaagagac cctacacatg gcctagaaat
                                                                      840
gagagaagag agaggtattt acccagagga ttttcctatg gttggggatg caaatattag
                                                                      900
aaaacagatt gtattttgct gaggggagtg gctgtcatga gcatgtcagt tctaaaaggg
                                                                      960
gttttcatta tcctggaaat gtataaacta aagtaagctg attggctttg caaacatgtt
                                                                    .1020
catttgtttt tcagacagta tgggttaagt tctctgccct ccccaggggt ctgaggaggc
                                                                     1080
tetgggttte teagatetgt etettgetge gtttteaeat eagetgtget gettggtgee
                                                                     1140
tetetgatae gaatacaetg acaegteaaa gtaacetaat gtggacaeca teeagaaaae
                                                                     1200
tecagtteat getggatett aaccaaaaat gatteaatae tgttateaet aaaacageae
                                                                     1260
caagacctga agccatcttc ccttggagtc aactgactac cacctctata agcctagtca
                                                                     1320
atgagcagac cccttccagt atttgtaaaa gtagtactag gttgcctttt tggcaatttt
                                                                     1380
tattgacetg ttgaatettg actataaaat gatetgagaa gtaaggaagg etgggetgat
                                                                     1440
gtgtggctct catatacctt ctgcaagggg gcagtctccc cagctccctg atgatgctca
                                                                     1500
cccccgccc cccacctcag gtgctgctgg tgtgagccaa agactggagt ttttccagct
                                                                     1560
ggggtgggag tggagagaca acaggaacaa cgctgcacca aagaaaaggt cagaataaaa
                                                                     1620
ggcagcacag ctggtgacct tattttctag atgttacaaa tcaggtcact atgcaaacta
                                                                     1680
gaatateete ageaggtgge etggeeaete tggagaaaga aacceaagga aagtgageae
                                                                     1740
ccaactggat gccaagacac ccgggttctg aaaatgtgct gtgttcctac ctcggcaaga
                                                                     1800
tcaccagcac tgaggggccc agctggagaa tgattctgct acaaaaggag acagttgaga
                                                                     1860
cttttgcttg ttggaaatca aacttcttat ttgtctaaat tgcccctttt tctgttccta
                                                                     1920
aaaggaagga taagagagaa cattccaggt gaggcacttc aaagtttcct tagaccctat
                                                                     1980
agtgttaaga ggtattttaa ac
                                                                     2002
```

```
<211> 1057
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (43)...(677)
<223> similar to gi4559368 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 4928 - . . tegtgtggtg gaatteaegg cateetgeee ceaetgegea cagaggeeae agagteegae 60 120 tcagacagcg acggtacggg tgactccagc tatgccagag tggtggggtc ggacgccgtg gactetgeae agtectetge cetetgteeg tetettgeag tggtggggte agatgetgtg 180 240 gactetggga cetgeagete tgcetttget ggetgggagg tgcacacgeg aggtatagge 300 tecagaetee teaceaagat gggetatgag tttggeaagg gtttgggeeg acaegeggaa 360 ggccgggtgg agcccatcca tgctgtggtg ttgcctcgag ggaagtcgct ggaccagtgt gtggagaccc tgcagaagca gaccagggtt ggcaaggctg gcaccaacaa gccccccagg 420 tgccggggaa gagggccag gcctgggggc cgcccagctc ctcggaatgt gtttgacttc 480 ctcaatgaaa agctgcaagg tcaggctcct ggggccctag aagccggggc ggccccagcg 540 gggaggagga gcaaggacat gtaccatgcc agcaagagtg ccaagcgggc cctgagcctg 600 cggctcttcc agactgagga gaagatcgag cgaacccagc gggacatcag gagcatccag 660 gaggeteteg ceegeaacge tggceggeat agegtggegt cageceaget geaggagaag 720 780 ctggcaggag cccagcgcca gctggggcag ctccgggctc aggaagccgg cctgcagcag gagcagagga aggcagacac ccacaagaag atgactgagt tctagagacc ccacaagcac 840 tatggacgaa gcgtgggacc ccagcacggg ctgccctcag gaagaccagt gttgcccgag 900 gaggggeegg eetgetggee tggggegtge ggacactget gagtggagae agagetgegg 960 ggtcccatct ggacacttac ttgcccacct gccagtgtct tgggcatttc cttggcaagg 1020 acattaaagt gatttcatca cagtgtcaaa aaaaaaa 1057

```
<210> 4929
<211> 4061
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4062)...(2827)
<223> similar to gi577307 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4929

ttttttttt ttagggggtt aaatgtttat taaatcaagc ttttaaatta tatatccacc 60
tacagtctat aaacaaatat agtacacatg tatgtaaaag gctagcagat aagaaccagt 120
ggaaaaacta aagttccctt tgcacaccgg cacctcatca caacaccctc ttggtgtgga 180
tgccatgggg ccatgctgta gtcaaaagtt aaatgaaaaa ccacaagttt agtttgactc 240
cgtctcctag ggtggatttc attcagatat ttgttccata ttataggagg gtggatccta 300
```

```
gcaaggcaac agtgtagttt ttacattcac agattggctg aagtagtaca aattgagctg
                                                                      360
ctaatctagg tgtctccctc cctgttacca tacttcataa gaaatgtgaa ttaaaatgaa
                                                                      420
caatggacca caggtggtta taaaaataga taactcgcag agtcataaat atctacagtt
                                                                      480
agtagagcag aaacttctaa aatttacctt tttccataat gtgcagaata tcctaagtat
                                                                      540
gttcaagaga cacagtcagc agacttcaga gtggtaatta caagggcatt tgtaaagaaa
                                                                      600
taacactoga gtacaaacco agagtaagaa gotgaatgoa gatgaaaata ogcaaaacac
                                                                      660
gcaaagttcc aactcctcac atctcattat gctacttact agacaccaca attagcttac
                                                                      720
agecetttat atatetttta aagtaaettt tigttaeetg igtacaaact itaacaaaga.
                                                                      780
tttttcatga gacaagcaaa gtgggttaat ggtggcgcta aaactgctga aacttggagt
                                                                      840
                                                                      900
gttttgtgtg ctttcgtata cttctgtgta tggggcttta aaatgctcca aaaatgtttt
ggatagagit titaaaatto ccatgaaaat ctatittata atcatticaa ggtatagaaa
                                                                      960
aaaagaaatc ctaaactggc attgagggac aggcccaaat ctcacaaagt aacttaaatt
                                                                     1020
                                                                     1080
ctaggaatat ataaattaca ttcatatgtt catttaacac gtatcaagtg ctatgtaagg
taactgtaat ggattetgaa gecaatetea tttaaaacag tacagtaaat eecattetaa
                                                                     1140
                                                                     1200
ttetacaatt aaageaetta tteeaggtaa tgtgegttte ageaaagetg acatettgta
caacagtgtc accttaaagc ttcatcaaag attcacagca ggcctgaact gtaaaagttc
                                                                     1260
agaaccaaca atgccacagg tagttattca tcctaatttc tcgcagggag tgaagggtct
                                                                     1320
acttgagtga tcctaaggtc acctaagcct agaacagtgt tccctgaaaa ctccagcaag
                                                                     1380
tttcctcacc aaaatctctt cagtgtaatg tgtttgggac ttgctaggct agaaaaatgg
                                                                     1440
gttccactga tgtataaaca tacattcgac accttcaaga ggtgtacaga catagtgttt
                                                                     1500
cccagactca cttgaccttt ccagggaaca cctggaataa tcactggctc ttgggacagt
                                                                     1560
catttcctag ggaacacaat tagaggaatg ccaagttaaa gcagattttc taaagtagtg
                                                                     1620
gttcacatat tgtagtaagc atcagaaaca cagatgccac accecttcag aagtccaggg
                                                                     1680
tgggacctgg gaacctgcat ttctgagacc gccccttccc ccacccccc acaagtgaag
                                                                     1740
ctgatgctgc tgcaccgaag accgcccttg gagtggcact tgttgagagg atggcctgca
                                                                     1800
tagateteag etgeaggaag eceteetatg geeteaggaa aggetgeaca tggeatttge
                                                                     1860
acaaccaatg agtcggaggt caaatcagcc cagtgacttc tcagagggtc catgcaacct
                                                                     1920 "
tggcactgac acttgaactc ctggctctgt acccctgcct cacttaggtg acccaggagg
                                                                     1980
agtgactgca tettaacaag aggacttaac agtageceet tgcacceec agtggatett
                                                                     2040
gtgatgttta agataaatgt ttgctaaaaa atgcactaac tagcctaaag catcatacaa
                                                                     2100
gtgtctgtta atcagaagaa tgtgccagcc acagcaggaa aatcccagat gaattttctg
                                                                     2160
tettgttace tetgageett gaegaaggea tattetgaea aetaaegaag agaaaagagg
                                                                     2220
ctaaaaatgc agacaactgc agtgaggggg aaatacatga gtggattatc taattaaaaa
                                                                     2280
tgcctgattg ttaaaaaaac aaaggtcagc ccacaatcaa agtagttaat tatgctggct
                                                                     2340
ttgagatagt gtttaaaagt taaatatgtt gatetttgaa cacactcact cetecactet
                                                                     2400
accatgttaa tgctggttaa aatttaacac tagaaaaatg agaaaaaaaa tcctccactc
                                                                     2460
aaatacatat gaattacacc taaaatattt ggctgagatc gttccaatct tataagctac
                                                                     2520
gattgtgtgg aaatttcata agcaattttg aaaaaaagac atcaaatttt ggctcataga
                                                                     2580
aacatccaca gaatgaggaa taaacccacc attcacatgt ttgcatgtgt gtttagttaa
                                                                     2640
tggcccagta ccactttggc taatgaactg cctctcacaa ttacaaaaac gaacctgtaa
                                                                     2700
aaattcatac atatccgtga tgagattaca gtcaaacatc atgttgccaa gtcctggttt
                                                                     2760
ccaccgtgaa cccaaaagat tgatcagaaa ggcagaactt cccccaacac gttgcatgat
                                                                     2820
teactitatg tatgetetgg atggetetga agacaagaca acatetettg aactggtetg
                                                                     2880
ctttcgtagc agatctgata cactgcagta aacaatggaa acttgtccag tagtcccttc
                                                                     2940
tgtttgagga tgcggtacac ttcagcagaa gtctgcggtc cttggagctt ttgcccattc
                                                                     3000
agcatetect tetecaacte tteaatggte tteecagtte tggegaagge eteggeeace
                                                                     3060
ctgcggttcc gccctccgta acaggtggtg atcaggtcgg ccaccccgca gctctctagg
                                                                     3120
aaggtggctg tagacacttg gcctttgcag aagatcctgg caaaagcaat catttccatg
                                                                     3180
agteceagge ggatgaegge egetttggtg ttgteteeae ageggaggee gtegeagaae
                                                                     3240
ccagctccca cagctacgat gttcttaagc gcaccacaga gttcaacagt gtctgcatca
                                                                     3300
tcaaccacgg taattcgaaa atttggagtc tgcagaagtt ctttgaagag aaggccgttc
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tecattaett tgetgeegat ggtggtetea eagaaettet etgeageeae eteattggea
                                                                     3420
atgttggctc ccatcagcac actgatgtca atacccatct tctcacggat gatgtcagaa
                                                                     3480
atgagettea geceeteggg gecetegtet atgeeettga tgagggtgat teceageget
                                                                     3540
ttettgggea eteteeeagt gateteatea eagattetgt gaatgaaetg gtggggaatg
                                                                     3600
acaaacacca gcaggtctgc atcctgcaca gcctcgctaa gatttgacat ggcaaccaca
                                                                     3660
ttttctggca gcttgtgtcc aggaagatat tttacatttt catggtcatt atttatgatg
                                                                     3720
```

```
tetgtcagtt ttetgecatt caetgittet teaaagacee acatettgae tgtggaggea 3780
aatttetgaa gtttettgae gttattacea attatttttg caacagetga accecagtte 3840
ceegageeca egatgeacae ttteagggge geegetgeea tggeegggee gaatgtagee 3900
geetggaeeg tgetteeetg geeggetgee caeeteegee tgtteageet tgeeegeage 3960
ggetggegge ggeeeegeee etttegeete teegeeaatg gtegeggea eeeeegeeegggge cegeagetga eageggggea ggaeeegett e 4020
4061
```

```
<210> 4930
<211> 4741
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(4742)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (4741)...(505)

<223> similar to gi5689487 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4930
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coaccetet eccatecety cegtgetgge acetgeaget gggtggaact ggcagggget
                                                                      180
gateceetgg agggetgacg tteteetgea ggtggggetg cetgatetee tteggggete
                                                                      240
                                                                      300
aactgetgat geeteeteac ceeteacaca cecatetetg ceatetgete acatgeaagg
tcatcttgtg ggcctgtcca cttaacttag caggctgggg gcggggaagg agagcagtgt
                                                                      360
cccaggectg atgeceacte eteatteect aagggagggt gettteteet gggteteetg
                                                                      420
ggtccaggcc aggggatgtg agggctgtgg ggtgctggga ggggggcagt gttgatgtgg
                                                                      480
                                                                      540
getetgaget tgtggeette etteatttte tetggeecag tagaactttg gtgatgaagg
                                                                      600
tgacaatggc gccagcaggc tgatctgggt caagctctgc aaagaggtga cacacattct
                                                                      660
cccagggget teccggette ttggccaega aaccaaagat ettggaggtg gteccgtetg
                                                                      720
ggttggtcca tctccggtct tgagggtcag tgctggagaa ggtgatgctg ttcactggat
aatggcggcg aaagaagagc ttcctttggt tgtccgtcag tgtaatgccc tgggctgaca
                                                                      780
ccttgaagtg gacaacagct ggtgtcgggc gggggctaca gctcagagct gcagagctgg
                                                                      840
                                                                      900
cccgggccac agettggggg cccgtcagtg actctgtctc cactgaggtc aagtagagca
cgctgcaggc agcaccctga cgcaggaggt ctgccgctgt gctcatgttg gtgggcactg
                                                                      960
gageetetgg ggtetettee agaggatett tgetgggaat gegeaggeag cagggeaggg
                                                                     1020
                                                                     1080
agatggggga gatggagtgc tgggagacca aggcggacag gctgccaaag tagggctcac
tggggcagec ettgatette acceetttgg geccagtete gatgaggaaa tggeggaeea
                                                                     1140
                                                                     1200
getgttecae ggggteceet ttecaggget gggcaetggg tggeggtgtg gecaeettga
gggccagccc ataagctcct tggaatgaat gactgtccct gatcaggaag gccccagggt
                                                                     1260
cettgteett cageagggea atggettggt caegggacag gtgtggettg taccagaact
                                                                     1320
                                                                     1380
tggatgtatc ctggacaaac ttgacattgc tttggctctc ttgtgtagga ggctctgggg
                                                                     1440
tttgggggac attatetgag ageagaggtg egaaggtgae atggtgaetg atgeetetgg
                                                                     1500
ctggcgatga tgcctgctct gggccccagg gtcctggctg ttgccccggc ccgggcaggt
                                                                     1560
ggcgtttctc aggaagtggg ggctggctaa ggccattggt gtcataggag gcagccaggg
```

```
1620
ggaaagcagg tgtaggtgag ctctgaggcg gctctgggct ggccacaagc cagggcatct
                                                                    1680
gggaaggcac aggagtgagg ggagacccat ctgggctgtc gggggggcct cgagggcctt
gccaggggc gtggcggagg ccaggaagtg tggtgggcac agggctccga ggactggcgc
                                                                    1740
catctgagtg gcccctgga ctcctttcct gaggccagtc actgggcgag ctgggaggga
                                                                    1800
aggtcggaga gactgggcta ggggccagag gctcaggccc acttcccgac ggcagctcag
                                                                    1860
gggcctttcc ggtgcctgcc tgggaaacag ggggcaaggc ctcgccagga ctcagtctct
                                                                    1920
gagtgggcgc tgaggtgggg gacctggtgt cctgtcgccg ggtgctttcc ttgccctgga
                                                                    1980
ctggactgct ggtgtgcagg ggcgtggagg gaccagacaa ctctgacgaa gcactgcatg
                                                                    2040
                                                                    2100
gggcateteg gggagacega ggcagtgtge tgtgcccaet ggggccetee etecaggaca
                                                                    2160
coggetecag egactetgea gatgecaaag gteetgetga ggccaggtge ccaggeaatg
                                                                    2220
ggtacctgtc ccctccctcc tccgtaggga tctcgtagct cagcttccta gattgtggat
                                                                    2280
aqqqqqqct gcccqqqqaa atqqaqccaq cccqtqqqqa gtqqqcacca ggqctgqgat
                                                                    2340
accetetgee eteteetgga gageeacage tatgaggeae aeggeeatat getgggeagt
                                                                     2400
aactgggaac tgctcctcca tagctgtatg tcaccagggc agggtaccct ggatgcccat
                                                                     2460
acctgccttc ggggcacatg gtgtaggagc agccctcgtg cccttcctcg cctgccttgg
                                                                     2520
gtggetteag geagetgtag teaggeateg gggeatggtg atgeecaeag geaggeaaga
gcagaggcag cgggtgccca ggccgcactg ggtgcaggag aggcttgcca gcctcacttg
                                                                     2580
cccaccette tecageetee etetecagee geagtecata caaggetget gtaggeageg
                                                                    2640
ccagettete etegeagget gggcatgggt atagggcagg cageecaggg teetecagga
                                                                     2700
tgaccacete eeggtageet ggggegeggt agecaaagte eeeagtgget ggttteeeea
                                                                     2760
                                                                     2820
teteaggtgg gtaggggtat ageceetetg acagegateg geagaggege etetteteca
tegaggeete ggegtageee tggggggate ceteatagee eeegtaggee agtegeetee
                                                                     2880
totocagggt tocototggc oggtagtage occoattggg aaccoogcag ggctocoggt
                                                                    2940
                                                                    3000
agecetggeg geaggageag tggeggetga ggeeaggeet atggeetgga tacaeteega
ggtgggggcc tecgeceaca gtgggetget ettegteate taggatggee gtetegegee
                                                                    3060
cageteeceg geoceactg gecaeteege ageoteetag gaggegatee ageteetgee
                                                                    3120
                                                                    3180
gttcagcage tgtaggggge ggeeggeeag gggaeteage ageeggetet gtggtcageg
tggaggaatg gcctgagtcg ctgctgacag agagcatggg gggtggtgga ggctctggag
                                                                     3240
agggtgccgg gggggtctgc cggggaggcc gctgcacctg ggcataagga ctgccatcca
                                                                    3300
ggggaccccg ggtgtgggtc aaggagccat ccacactgtc ctcgtggtgc tggttgaagt
                                                                    3360
teteatagga gteecagege aeggetgget eagtggtgtt gtagtegaea gagaeegagg
                                                                     3420
ggtcgttccg tggagtgctg cctttgatct tctcggggct ggaggagaag acaaactcca
                                                                     3480
eggaggettg gaaggggaac eteteateag tecaggeete gteaagetgg teettgggga.
                                                                     3540
aagtgagetg tggteegtgg atggtgeagg tgtggaactg gaeteggaae aegagggtee
                                                                     3600
ggtctgtgcc ccggccaccc ttgtgataac atgttaccat gacatcgcct ttgaggagga
                                                                     3660
gggctggctc caggctgatg caaagctgct ggggaccagg gcctgcaatg tgatagactc
                                                                     3720
cagatgtgta gacaagctgc atggactggt agattttaag gaagggctgg aagcctgtgc
                                                                     3780
caggttcaaa ggctggcagc atggggatga gcacatagtg caggaagaga gggctgctgt
                                                                     3840
                                                                     3900
tcattctgat ggagccagat agcagccac tgaagtagct gatatatcga cgctgggagg
                                                                     3960
getgeagtte tgtggeeace ttgteetege agaattteeg catggtaaga gtggeeagtg
                                                                     4020
cctggtccgc ccctgcagag atcttgctgt agtgcatgta ggcagaaacg atgacccaa
gcttgccctt gtttcccttg cagtatagta cgaccacgtg ctgtgggtca gcactgagcc
                                                                     4080
atgtctccat ggctttgcag atggagcaca gcttgtccag gggtggagca tgcagctcag
                                                                     4140
gccagccgaa gtcttgaacc ttggggttta agcgggtcag gtcatgcctt ttctctgaaa
                                                                     4200
ggttgaagag caggtacttg teeeggtget tggattgeag cacatgggee agetegegea
                                                                    4260
ggtggccccg gtgccgctgt tcatcgggcc gcgcggggaa ggcggccggcc aagatgcgct
                                                                     4320
cegtcaegta ggtgaggtet aagteecage geegeteeat gagegggtee aggetgaage
                                                                     4380
tectgggeag agtgetgege tgetttgagt ggttcagaga tttggtggat cecaggtget
                                                                     4440
ctatgcgcct gactggggcc gtgtttcgcc gcaactccac gggaggcaag gcctgacagg
                                                                     4500
etgaagteae etttgettea eattttetgt gegtegeeae ettgeagaet etgeaegaaa
                                                                    4560
egectgteee ategatggte acettacata etgeacagae tggaggttte tteeggaaaa
                                                                    4620
cetteteceg gaagetatga ggeteagett teetaggett catggetete etgggtetge
                                                                     4680
tetegtgnnt tecaegenet engaagtggt etegattnnn nnneneeegg gnneetteee
                                                                     4740
                                                                     4741
```

```
<210> 4931
<211> 3034
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2522)...(1849)
<223> similar to gi2981435 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4931

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```
ggccaaggtc agcccagctt aacactagcc gttcctttgg ctgattttta atcttcatca
                                                                     2460
agaaatattt cttccttatt ctccaaccta tgtctttcaa aggttccacc acctcccact
                                                                     2520
ttggttctga tcggaagaac atggaaacct gttgcaaggc aatctcagta tagtttgcgg
                                                                     2580
aatagttgtt tggatctaaa aacttcttaa ccagctcaca attagacaag atatgatttg
                                                                     2640
ttgtgatcac gttgagatag ttctgaagac ctttctgcct ttcagctatg aattcacgat
                                                                     2700
ccatgttacc aatcaatttt ttgggaggaa gaggtagact taggcctgca atctgtaagc
                                                                     2760
                                                                     2820
tgttgttaag caaatcaaag tcactgtatc ttctaacaat ctgccagctg ttttccacag
                                                                     2880
aaatteetet ttgeaetega ataatatatt eegtgtggga etgeaggete tggetegeet
cgatggctgc tgtcagcggc accgtgtcgt ccagcagcac cttgccggct ggcggcttct
                                                                     2940
ccatgaagge catcccggga cgcccggccg ccgccgccta gggacgcgag gtaggaaccc
                                                                     3000
                                                                     3034
gaggegeega etecegeege eegeeeggae gaaa
```

```
<210> 4932
<211> 1461
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5) ... (248)
<223> similar to gi2290725 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4932
cataatagcc atcgacttcg gggagcaggc cttgaacegg ggcattgctg ctgtcaagga
                                                                       60
ggatgcagte gagatgctgg ccagctacgg getggegtae teeeteatga agttetteae
                                                                      120
gggtcccatg agtgacttca aaaatgtggg cctggtgttt gtgaacagca agagagacag
                                                                      180
gaccaaagcc gtcctgtgta tggtggtggc aggggccatc gctgccgtct ttcacacact
                                                                      240
gataggtgag gccgccgacc gccactgacg aatctagctt tggcaatttc ttattccttt
                                                                      300
tcattgattt aaatgtattt attgagataa gtggtttctt cactaattat caaatgtttc
                                                                      360
ttatgaaatt ttcaggggat agaaggaaag cgcttgtgct cctagcttaa gacaataatg
                                                                      420
tgttttttct ggggagctgt agttttgtgt ctctgattcc caaagtgaaa agcagtgatt
                                                                      480
tcattagtag gcgattacat ctaggaataa catttggtaa ggccaataaa atagcaggtg
                                                                      540
ctttcgttag agatatgtgt gcgtcattgt actgggtcat taaatcttaa gaataaaaat
                                                                      600
agaatgactt atttagaatt aatgettatt ageagtgaga acaaatgaca gattgtteta
                                                                      660
tttattaatt tgttctagga tcttattcta ttttattcaa agacaagact aaatgctctt
                                                                      720
gtgatagcat teettteece atgaaacaae aggaaagetg tatecatace atacagtgae
                                                                      780
tggccctccc agtttaaccc aagaccccct ggaaaagcag ctctccttca gggctggagt
                                                                      840
teetgetget getttettgg tggggataaa ageetteagg ceatgaette egtegtgget
                                                                      900
ttaaaacagc tttgcttacc tggcataaaa attgagtggt acctctactg aaaccagtta
                                                                      960
cataaaacac tgtgaatgac acttcataaa cccattgtgt accttaaaat tgttactgat
                                                                     1020
tgtttaagac gcgtgactgt cagtggtgaa taaaggaacc aaaagattaa cccagaccgt
                                                                     1080
ttacagtgtg tttgcatggc agctaatgct tactcacata actgcgaatc tgaaagtaaa
                                                                     1140
taaggtaagg cetttgtggt ttteettttt aatgtgacat aaaattttgt getaagaaca
                                                                     1200
ttgtggaaga gagcgcatct gctgatggac cagacattca gccaaagcgt tgatattgat
                                                                     1260
cetttaattt gtgeteagag etteagggea tggagtaaag aggagetgee teteatttee
                                                                     1320
tcagtttatg ccctgaaggc taactgtgga ctgagtattt gcacatgtac ttgtatttga
                                                                     1380
agtaaatttc tgctacattt gacctgagcc attttcaaag aatacatgta cagtatttgg
                                                                     1440
gaaaaaaaa aaagtcgacg c
                                                                     1461
```

```
<210> 4933
<211> 1065
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1066)...(478)
<223> similar to gi1322603 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4933
gaatccctat gttaaacccg tggtttctca tgaattagat cataatttaa cattgtaaaa
                                                                       60
tttcagaaac tattgtgcta atatttagat ttcaggaagg aatcagacta aatcaattac
                                                                      120
ctccattcat tgttagaaca gaagatataa tagcttacta actgatatga gttatgaatg
                                                                      180
teactatgae acaaaatttg etgtgatttg etaatetgge tacaagtgea gtatttttea
                                                                      240
tgaatgacaa cacacagcat ttccaacttg taacatgaaa ctccagctca taaagagtgt
                                                                      300
attgtgtgac ttgaaaaagt ctgattgtaa ctaagtaaca accgttcccc tgaaaaaacg
                                                                      360
aacaaaatee attaggaaat eaggeacaga eggtattgat eggtttttet teettteete
                                                                      420
ctgtggtttt gtttctcaag acatataggt ggttccaaca gaagccaaca cttgttacaa
                                                                      480
aataacacag ctattttttt cettttettt ttetttatet ttttetegtg gtteetteeg
                                                                      540
tttacgttca ctattcccag attgtcttcc acttgatgga gaggettgtg etggetggee
                                                                      600
ctgctgagcc tgtgtagaag cagcagcagc agcagctgct gcttgttcct gttcctgata
                                                                      660
gtattgagaa geeegtetgt eetetteete ttggagttte tttgetagtt ceaaateact
                                                                      720
gattccttcc gggatttgtt cccaattgat ctcttggctc tgctgttctt gttgtagaga
                                                                      780
taatgecata agataateet gatetatetg atettgttgt cetttgtata cagttteagg
                                                                      840
atctgaagga ggtcgaagat gaaattctga gtcacagaaa tttccatcac catctacqtt
                                                                      900
gtgtaggett teccaaacaa etttetette agtaagaaac eeetggteeg ttaccaacaa
                                                                      960
atacagttga cccttgtatt tggtcatggt gctaaaatga ttattccgaa agaacacaca
                                                                     1020
aagtteteet teetgaaceg ttgaagttag tteacataat ceatg
                                                                     1065
```

<400>. 4934 gcaagggccg cagccagcac cgggcggaga gggctaccat ggggaaaatc gcgctgcaac 60 tcaaagccac gctggagaac atcaccaacc tccggcccgt gggcgaggac ttccggtggt 120 180 acctgaagat gaaatgtggc aactgtggtg agatttcgga caagtggcag tacatccggc tgatggacag tgtggcactg aaggggggcc gtggcagtgc ttccatggtc cagaagtgca 240 agctgtgtgc aagagaaaat tccatcgaga ttttaagcag caccatcaag ccttacaatg 300 ctgaagacaa tgagaacttc aagacaatag tggagtttga gtgccggggc cttgaaccag 360· ttgatttcca gccgcaggct gggtttgctg ctgaaggtgt ggagtcaggg acagccttca 420 gtgacattaa tetgeaggag aaggaetgga etgaetatga tgaaaaggee caggagtetg 480 tgggaatcta tgaggtcacc caccagtttg tgaagtgctg atccctcttc cttcccagtt 540 gcccttaaga actgagaaag gacaaagtac tctaagcagc agagcccaca gaggctcgtt 600 cetttgacce ttgtctcctg gtggctatac gaaacettca caatetgcat gctggacttt 660 attacagett cecaageece ateaataaag cecetgttea egetgeactg gtgeatgaag 720 gtgaagtaag gaggcagcta ctccctccac aaataagaat tcgtgcagca gcagttcact 780 ccttaggaaa atgaagagta tttttaagga gatggtatct ccccagtcaa gggcaagttt 840 acagagatga aaccgcgatc ccaccatcac tcaatgagcc agaagccaat ggtgacgtac 90Ò tgttacctga acttactgaa cttgctgttg gaaagatctt tgtgaggatt aggaattagg 960 ttaaaagaaa ttaagaacca tetteaagca aaaattaaac tttatttetg ettaaacaat 1020 aaatacacct gagttagagg cnnntcaaat gctaatacat ct 1062

```
<210> 4935
<211> 5451
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1025)

<223> similar to gi3413920 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4935
tccaccgccg gagcctcgcc ttcctttctc cctctgcaga cacaacgaga cacaaaaaga
                                                                       60
gaggcaacce ctagaccace gegaaggace catetgcace atgacegaga ecaceaagae
                                                                      120
ccacgttate ttgctcgcct gcggcagett caateccate accaaaggge acattcagat
                                                                      180
gtttgaaaga gccagggatt atctgcacaa aactggaagg tttattgtga ttggcgggat
                                                                      240
tgtctcccct gtccacgact cctatggaaa acagggcctc gtgtcaagcc ggcaccgtct
                                                                      300
catcatgtgt cagctggccg tccagaattc tgattggatc agggtggacc cttgggagtg
                                                                      360
ctaccaggac acctggcaga cgacctgcag cgtgttggaa caccaccggg acctcatgaa
                                                                      420
gagggtgact ggctgcatcc tctccaatgt caacacacct tccatgacac ctgtgatcgg
                                                                      480
acagecacaa aacgagacee eccageceat ttaccagaac ageaacgtgg ecaceaagee
                                                                      540
cactgcagec aagatettgg ggaaggtggg agaaageete ageeggatet getgtgteeg
                                                                      600
eccgccggtg gagcgtttca cctttgtaga tgagaatgcc aatctgggca cggtgatgcg
                                                                      660
gtatgaagag attgagctac ggatcctgct gctgtgtggt agtgacctgc tggagtcctt
                                                                      720
ctgcatccca gggctctgga acgaggcaga tatggaggtg attgttggtg actttgggat
                                                                      780
tgtggtggtg ccccgggatg cagccgacac agaccgaatc atgaatcact cctcaatact
                                                                      840
```

```
900
ccgcaaatac aaaaacaaca tcatggtggt gaaggatgac atcaaccatc ccatgtctgt
                                                                    960
tgtcagctca accaagagca ggctggccct gcagcatggg gacggccatg ttgtggatta
cctgtcccag ccggtcatcg actacatcct caaaagccag ctgtacatca atgcctccgg
                                                                   1020
ctagcagece etegtectee ggeaacacaa tggeecetee atetttgtea geeceetgtt
                                                                   1080
                                                                    1140
teteteetge etetetgttt etecatetee tegtettgae tgtttteeet aettgetgae
ttaacccccc atagtgtggg ggacctgcag agaaccatgg cattccctat tccacagtca
                                                                    1200
                                                                    1260
tetttggaca gaettteete tagteteegg gttgggggtg ggtgagggaa tggggtggga
                                                                    1320
gtcgggggaa gtgcagtcct tggagatgta ctggtgtccg tctcccagca tgctctagag
                                                                    1380
aggeggetet ggtgeeeate eteccageae getetgggga ggeggetetg gtgeeeatee
teccageatg etetagagag geggetetgg tgeceeteet eccageatge tetggggagg
                                                                    1440
                                                                    1500
cggctctggc tcttgccttc ccagcatgcc ctttactaca aagggctatt tttctttct
ttcttttgtt tatttatttt tctttgttca ctccctgtag aacttggatg aaatcagtgt
                                                                    1560
ccatggttct ttatgtttgt agtcttgatg tgctcctgtg gtattacttc ccctctgata
                                                                    1620
                                                                    1680
ggacattgta gccagcctca gcactcagtg agttcatcag ggccacaccc agtagagaag
gccaagcaac ctccacttct tcagcaccac acacacgcac acacacacac acgcacacat
                                                                    1740
gegtgtgcac cegegeacge acatacacac acacatatag cagtageage ageageagea
                                                                    1800
                                                                    1860
gcagcagcaa cctttgatca ggagtgagat tttcgggttc tgaaacctgg gacacgagtc
tgtgaatagt cggttttctc agaataattt gaatctgttt tcttagtttt caaatgacca
                                                                    1920
                                                                    1980
tttccctgat gctctgagct tatgatcaca cagagccagt ccatcctcat ttcctggtgg
                                                                    2040
catctgttca tttacctttg tggactgtag ctgatggcac agtgcgggtt ccctaccagc
                                                                    2100
caggggtttc caagggacct ttggaggcca tgcttagaca cattcctgta cctgagaaca
                                                                    2160
caaaaaaaca ctaggagtcc actcaaccct ggaggtcttt gctaattgga attatgtatt
                                                                    2220
gtctgttggg ctgggaaatg tctctttcat attgtaagtc caggatgaac taggagaaag
                                                                    2280
                                                                    2340
caatttgttg ccctgatgat aactgatgat tttcaccctc tctagctgag gtaactcaga
cagtgcatga ggtcagtttc ttcttgagaa gcagtgcctt ggtcttgttt ctgtggttgg
                                                                    2400
                                                                    2460
ttctagecce tgcagageet gggagetgea ggaactgtet gagaaaatet eeetaatagg
ggagtgggtt cccagaaggg agatctggga ggggtcagga gccactaagt tgcttcactc
                                                                    2520
cttttttctc taattttcta ccttcctctc tgttcctgca gacagttttg cccagctttg
                                                                    2580
                                                                    2640
cttcctggtt actagggtct caggcgtgtc cctgcttgga gagcccataa ggaaattgcc
tgtcttgtgc ctttgtgtct ctcatccagt ctctggctct tgggattctg gtctttgaga
                                                                    2700
                                                                    2760
aatagtccct gagtattagg atacttttat caaaatctag taccagctac ggccaggaaa
                                                                    2820
gggccaggtg gggacctgga aaggcaaagg acaatgttct tttaccacac gttttcacat
ctggcaacat ccttcaattg cgggaaaagg aacttgattt aacagaagaa catggtagag
                                                                    2880
cagcatccag aaagtctgtt attcctcttg gattttttga aataatcttc agaggaagga
                                                                    2940
                                                                    3000
aggaaaatcc tattttgggg tatcagtgtt tgactaggga tcatgaaata ataaactgaa
                                                                    3060
aaaaacttta gagttcagtt gatccaacac tttcctttaa aagttgaggg agcagaggcc
catgggatta aatggctggt ccaggtcagc cagcaggtgt agggcctgac aagaacatat
                                                                    3120
tgtttccctg acccctaggc cgtcacacca caccctccat ttcctcatgt tgctgaccag
                                                                    3180
gtgcccatat gatttctaca cttcccaagc cttaccctgg catctttctt ttaaattata
                                                                    3240
totgtoccag gtgototoca cacataggat ggtaatgoca gtoccagggg agggtgtgat
                                                                    3300
agtaaggaag gccactgtta ggtttccttt agaaataaag agatctcagc agcttggaag
                                                                    3360
                                                                    3420
aaatcccaga agcggaactc catcaatcca agaaagagtt gctttgtgga aggtgaagga
                                                                    3480
agacccacag agtgctcagg atgatgctat tgctggagag cgaaagatgg aacagccttg.
                                                                    3540
tccaggcaga acagtcataa gccaggaaat gaaacaaagg aaaacaggtg cctgaatttc
                                                                    3600
ctggggaaac atggcttgtt taaggacttg gagttatgga tggaatttat gggacccacg
tgagcagacc tgaggaaggc tcgatttctt ttgtttcttg gtccactctg tcactctgct
                                                                    3660
                                                                    3720
ctggtcaagc cccatttggt ctacagccca tgagaaggaa tgaggctggt tctgcactct
                                                                    3780
cagcatgcag tccgaaagca tgtgggagtg gggagggaaa gtgagatgaa ttaagacaaa
gaacaggtgc catagaagta gatttctagg aatgaagtgg ggcagatctt atctttgtgg
                                                                    3840
                                                                    3900
attacaggca ctgtactaaa aacaggtttc ctatttaata taaaaagaaa gtgaatcttc
ttttggatag aatcatccat tcccatcgcc gcacccccta cccccaaac acacacacac
                                                                    3960
                                                                    4020
acacacaca acacacacac acacacacac acacacacac gccctacttt ttatttgcta
                                                                    4080
ggggaaggtc acagcacaac taaatccagg acaggacatt gtgaccatga cccacccaca
gtcaatacca gaaagatgat tcagagtctg aaggggcgcc ccaggtgcca acaagataac
                                                                    4140
ctctacccc cgactttgtc tctggggtcc tgtttctttc tgcaaagccc aatccaagac
                                                                    4200
tggcatggct cagaggttgt gagaaaggca tggactggaa caatcatgtc cagaggggtc
                                                                    4260
```

```
tggagetttg ttteetgtte accageaaaa aatgtetete ecatttttet gaaagtgget
                                                                     4320
                                                                     4380
gatgtaagaa caggcagaag gaaaaccctt tttgtcaata actctgtcct taaggaatgg
                                                                     4440
teetetggga gggetgtget getagtgggt aceteagtea caeaceecea aeeecaggea
                                                                     4500
gcctctagag ccttcttgct ttcattttcc ttgaatgtac ataggaacaa gggggaaagt
                                                                     4560
ctcttactga agtgcctgaa acccaaagct agagcttcta gagacgccgt tcttcctgtc
                                                                     4620
tcagcttggc cagcctttca acaatgttct ctagtttcaa gctccagctt ctcagaaaga
                                                                     4680
attaaagaac ttgctgttca aattaagtag aaagtgagac tcaataataa ctgaactaca
                                                                     4740
gcaaaaggca gagaattaca gggagaaaaa acttgtactt accagcccaa ttctactctc
ctcaaactga cacacacaca cacacacaca cacacacaca cacacacaca cactcttttt
                                                                     4800
                                                                     4860
tttaggggac taagagagag aagcatgtta ttacatttta ctcatccaaa cagtaatgca
aaaataaaac ggtagaatat gaaaagctca ggatctctcc caaggctacc tactgcagga
                                                                     4920
gggccaacag gtgagatggg aagaatggaa acagggaccg attttgtagc tcatacaatt
                                                                     4980
                                                                     5040
aggacacett aggaatagea ttgtagtaat ggtgatgaat atgetetgee aaatteatee
                                                                     5100
agtotgcacc atottatago tgcccagcac actogactgt tcatgtggtc tctttgtagt
                                                                     5160
gtgagtttgg agtgtcctat tagcctgttc tggttaggaa tgagttaacg gctctttccc
                                                                     5220
tcaaccttag tctagtccca gggctgagga ttcagctgga tccacatggg tcttgaaggg
ttggcattga aggaaggggg aagctttttt gaatcgcttt ttgatcacat aatctgccat
                                                                     5280
tttaagagta agatttgctt tatggaaatc aattcattaa taaaaaatga tattcaagtt
                                                                     5340
gcaataccat ttcacagtga aatattttga gtacaatttt gttgctagaa tagtcatggg
                                                                     5400
caagagtttt atgcaaaatg tttcaattat gttaataaat aagacaatgc t
                                                                     5451
```

```
<210> 4936
<211> 2309
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (74)...(856)
<223> similar to gi6018317 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4936
agacgacgat ttcgtggcgg tgcagcttgg gcggcccagc ggatcgtgcc gcggcggccg
                                                                       60
                                                                      120
agegeageta caggagggtg tecagaagee acaagecatg getgtgggga acateaacga
getgeeegag aacateetge tggagetgtt caegeaegtg eeegeeegee agetgetget
                                                                      180
gaactgeege etggtetgea geetetggeg ggaeeteate gaeetegtga eeetetggaa
                                                                      240
                                                                      300
acgcaagtgc ctgcgagagg gcttcatcac tgaggactgg gaccagcccg tggccgactg
gaagatette taettettae ggageetgea eaggaacete etgeacaace egtgegetga
                                                                      360
agaggggttc gagttctgga gcctggatgt gaatggaggc gatgagtgga aggtggagga
                                                                      420
                                                                      480
tetetetega gaccagagga aggaatteee caatgaccag gteaagaaat aettegttae
ttcatattac acctgectea agteceaggt ggtggacete aaggeegaag ggtattggga
                                                                      540
ggagctgatg gataccacac ggccggacat cgaggtcaag gactggttcg cagccaggcc
                                                                      600
agattgcggg tccaagtacc agctgtgcgt tcagctcctg tcgtccgcgc acgcgcctct
                                                                      660
ggggacette cagecagace eggegaceat ecageagaag agegatgeea agtggaggga
                                                                      720
ggtctcccac acattctcca actacccgcc cggcgtccgc tacatctggt ttcagcacgg
                                                                      780
                                                                      840
eggegtggae acteattact gggeeggetg gtaeggeegg agggteacea acageageat
caccateggg eccegetge eetgacacce cetgageece catetgetga accetgactg
                                                                      900
gtaaacaact gctgtcagaa aagggctggg cttgggaagg ggaggtggag gccaggtgtc
                                                                      960
eccagacete taaccettge cectageage etettetttg tggageetet cagtgtggge
                                                                     1020
```

```
1080
agecetegea tgetggggte gggeeagete teecegaaag gtettgaeet gaatgatgge
                                                                     1140
cggggaagec tgegtgtgee cettteagag acggageace tgagatgtgg gaggtgeage
                                                                     1200
atgttcccct gggcccctca gaaagtcgag cttggaggcc agcctggatc tgtctctccc
ttcccctcct gggaccattc tacctgtgtt ctttgaccct cggagcaggg acaggcaaga
                                                                     1260
caactggcaa gcttgcagct gccctgatgg tgcaggtgca gggaggtgac catgtaactc
                                                                     1320
tgaccaatct gggaagtgga gggtgggctc atgggccgtg ctctgcccct gtctgctgct
                                                                     1380
eccagtettt egetetgeet geetgeteag aagaggtgge tttggeeeag aggeteagge
                                                                     1440
                                                                     1500
cgggactgag atggacagac ccagggtggg gtggggtcca ggttgggtgt ggactgtcct
                                                                     1560
cactgtcagt ggagccccag aagctagatg ggtaccaggt ggggttaggt tcccagagga
                                                                     1620
ctgagggaat cctgtacagg atgtcccagg gtagatgggg agcaggattg ggacctgctc
tgacagetgg acacatgage cetggatgag tatggtaagg gggtttgaag aatcecetgt
                                                                     1680
                                                                     1740
ccacetecca aatecaggee eggeeecete tggettggag ageattecaa geeeceaece
cacccctaga actgccattc ccaagacctc tgtctcccag ccaaccaccc ttggaacttg
                                                                     1800
cetettgtee tgetggaaag atageagtgt teteetgaet tegeectaet geatgeagee
                                                                     1860
                                                                     1920
aaataaaagg tgtgcccagc ctaacctgtg ccctgtggtt tctggaagga aaggcagact
                                                                     1980
ttaggtggtc ctgcctggac ctgcagatgg tacaatggca tggcttctgt ctaaggtaca
                                                                     2040
gaggggttgg catttcagga cctaggccat cacagaaaca ggttcatggg cagcccctc
                                                                     2100
agtgagetge aggtatetea eetggeagee gteeagtaet getggettee tetggaggee
cagecacagg etggggttgg ggtgtgtgga catetetggg cagetettga gtecacettg
                                                                     2160
tgccagatea gcagtgccac ccaggetetg ceteetggtg ttattetttg ccaacagett
                                                                     2220
                                                                     2280
tacggccatt ggatgaagcc gcccacttt agaatggtgc ctggcacacg gctggtgcga
                                                                     2309
aatagcaaaa gctttgtgtc cccccacg
```

```
<210> 4937
<211> 1035
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6) ... (609)
<223> similar to gi3413830 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4937.
attetgagga acggggaetg tecceggege teggeeteeg gggetetetg egageeeggg
                                                                       60
geogegggga etcegtteca geogeegegt eegaggegga eccgtteete caeeggetge
                                                                      120
gccccatgct cagctccgcc tttggccagg atagatcact gcgaccagag gaaattgaag
                                                                      180
agctccgaga ggccttcaga gaattcgaca aggacaagga tggctacatc aactgccggg
                                                                      240
                                                                      300
atctgggcaa ctgcatgcgc accatgggct acatgcccac cgagatggag ctcatcgaac
tgtcccagca gatcaacatg aacctgggtg gccatgtaga ttttgatgac ttcgtggagc
                                                                      360
taatggggcc taaactcctg gcagagacag cagatatgat tggtgtaaag gaactgcgag
                                                                      420
atgettteeg agagtttgae accaatggtg atggggaaat aageaceagt gagetgegag
                                                                      480
aggetatgag gaageteetg ggteateagg tgggacaeeg agacatagag gaaattatee
                                                                      540
gagatgtgga cctcaatggg gatggacgag tggactttga agagtttgtc cggatgatgt
                                                                      600
cccgctgagg ccgcgagggc ccctccagga ctgccaaget cccaaaggcg gggctaagag
                                                                      660
gagetagage ttgeeteace egetgtagee geegagagee eeaggatgta etggeggatg
                                                                      720
gggcctgcct gcaccccggg gaggcgccca ccccggaccc ccacccctcc gcactgtgaa
                                                                      780
agactaactc ctgcaactgg aaaagcgggg gcgcccgccg acgaggaggc caccgtgcca
                                                                      840
agccggcagg agttcatgcc caggcgccaa gggccatgct gcccagctgc tgctggctgg
                                                                      900
```

```
gtgggccagg gagcccgcca gcagacccca cacagcatgt ccgccccgag gcaaagcctc 960 ccaccttcgc tctgcgcccg tcccagctcg cctcagccct gttatctcag aaccaataaa 1020 aatatttcca agagc 1035
```

```
<210> 4938
<211> 2224
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (501)...(931)
<223> similar to gi4240124 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

agagegecag ccagactgea ggtgeatage ttetggagee gecagetgtg cecaagaget 60 ceteagagee tgetgteeat geecetggta cecetggaaa eeetgteage etetetacea 120 actectecet ggeeteetet ggggaactag tggageetag agtggaacaa atgeeteaag 180 ccagccetgg cettgecete aggaccaggg geageteagg tecceageea gecaageeet 240 300 geagtggege caccecaacg cetetettgt tggttggaga caggageceg gtgeetteee ctggaagete gtccccacag ctgcaggtaa agtcctcctg caaggagaat ccttttaacc 360 ggaagccatc acctgcagcg tccccagcca caaagaaggc caccaaggga tccaagccag 420 tgaggccacc tgcccctgga cacggctttc cactcatcaa acgcaaggtc caggctgacc 480 agtacatece tgaggaggae atecatggag agatggatae cattgagege eggetggatg 540 ccctggagca ccgtggggtg ctgctggagg agaagctgcg tggcggcctg aatgagggcc 600 gtgaggatga catgctggtg gactggttca agctcatcca cgagaagcac ctactggtgc 660 ggcgagagtc cgagctcatc tatgtcttca agcagcagaa cctggagcag cgccaggctg 720 atgtcgagta tgagctccgg tgcctcctca ataagccaga aaaggactgg acggaggagg 780 accgggcccg ggagaaggtg ctgatgcagg agcttgtgac cctcattgag cagcgcaacg 840 ctatcatcaa ctgcctggat gaggaccggc agagggagga agaggaagac aagatgttgg 900 aagccatgat caagaagaaa gagttccaga gggaggctga acctgagggc aagaagaagg 960 ggaagttcaa gaccatgaag atgttgaaac tgctaggaaa caaacgtgat gccaagagca 1020 agtcccccag agacaagagc taacagcacg agaagccagt tggggactgc cccctcctgg 1080 ageageteet gggetgtget etgtttgaag ggggegeeet geteeectea gateagteag 1140 gaggaagatg actaagggga gggatcetet gggtgatgge etetteetee teagggacet 1200 etgactgete tgggecaaag aatetettgt ttetteteeg ageeceagge ageggtgatt 1260 cagccetgee caacetgatt etgatgactg eggatgetgt gaeggaceca aggggeaaat 1320 agggtcccag ggtccaggga ggggcgcctg ctgagcactt ccgcccctca ccctgcccag 1380 eccetgecat gagetetggg etgggtetee geetecaggg ttetgetett ecaggeagge 1440 cagcaagtgg cgctgggcca cactggcttc ttcctgcccc atccctggct ctgagtctct 1500 gtottootgt cotgtgoagg ogcoottgga totoagttto cotoactoag gaactotgtt -1560 tetgaagtet teagttaagt ttgagtttat gaetgagtgg eetgtaetgt eagaegtgaa 1620 tgggcctgac gggcaaatéc atcectetét cecteacagt tecaggageg getteéetég 1680 teteceetta etecacaggg ageeteeett geeaggaeea gggetgegae ggeeatgetg 1740 gggcaggtga gtgctctgtt agctgctccc agtgctgtcc ccaggctgca gttctggtcc 1800 ctggttgtca ggtaggaagg gtgcacttga agcaggtgct catctcggtt ccttaacgtt 1860 tatagtetga ecceteaett aggettteet etgecaeece ggtecaggga agaggetege 1920 tecogeceat ggteateact ggtetgtetg etetgttgte tgttetttee etgacteeet 1980 cccaccgaag gcctgatggc tactcacccc tctgggatgg ctatgggaga ggaggagtga 2040

```
tggggacege cacettteet geaggaaatg tgeecageag etettggtea aageaetgtt 2100 getataaget atetetggga tgeetetagg eeceetteee tetacacace tetgggaaaa 2160 gattacactg tattaaetet egaggagttt eeteaceaat aaacagacaa eeteaaaaaa 2220 aaaa
```

```
<210> 4939
<211> 1238
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1171)...(101)
<223> similar to gi473431 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4939
ttttttttt ttcaagtgta gtcacagttt atttctgatg tggctgaatc tagggacagg
                                                                       60
cgggctgggc tgagtggggg gcgtgtcggc gatggggcta gaactccacc ttgcaggccg
                                                                      120
ggaaggegte atcetgeatg gacaccatge tgttgetgee caacaccgtg atgeccageg
                                                                      180
                                                                      240
cctggtgccg ggcgtgcgtc tctgcgtacc acgtatgcat ggccaccgag tcgaaagtgg
                                                                      300
ggatcagggt cacctgcagg tcacggtccc aatgctgctt gctggccagt agcgcgtcca
                                                                      360
ggacggccg catgccttcc tecttgcgct ggtcctggcc actgatgacg tagcagageg
                                                                      420
cgcgcacgcg ctggaagaac tectcateca ccaggtgggc gctgctcccg ctgggcaggt
                                                                      480
aggecaggte caggtagace ggggaettgg gtggggtgge tgaeaceceg ggeeggetge
                                                                      540
tggctgaccc cgacgggcct cgagtggcag tcttgggggt tgaggacttt ctggacaggg
                                                                      600
gtgcccggcc tcccttctca ctgggctcac tccgggcact gagtggtcgg ctggcacggt
ccccaccage aageceettg gttttggcag cagecactgg agtggetttg ggggeggcag
                                                                      660
                                                                      720
egegtgagtt ggggegggee aggggettee gggtgegget gaegttetee gtttgeegtg
                                                                      780
etgtettggg gggeageate teggggteea ceatgeagat getggatggg teaggeagtg
gtgggggac cttgaggggg tcaggcaaag ggtcgtggcg agggactcca aagccctctg
                                                                      840
tgtcttcgtc tgagtctgcc gcaccggggg ccaggggcac gggatccgag tcagacaggg
                                                                      900
                                                                      960
tgggcaggga ctcgctgacc gatgtgggtg gcgtctcctc ggcccccagc ccacctgccc
                                                                     1020
gttcctgtga ccgggcactg ctgtcattcg agctgccggg ggacgcaggt gccggtgcca.
                                                                     1080
ttggcaccgc cttgcgatgc tcaaattcac agggtgacac caggcacagg tccacatcgt
gtggggaage egagegeege geeeggggge caegeagegg gaggeteage ceageeteae
                                                                     1140
tggtgggggc ggatggcggc agcaccgtgc tcaaaggaca ccgacaggga ctcgtccacc
                                                                     1200
teggtegagt geggggagee caectetgeg ggtagtga
                                                                     1238
```

```
<210> 4940
<211> 1375
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (546)...(748) <223> similar to gi4098993 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 4940
ageggeegeg tgeagggget getggaggag gaggeggegg etegaggeeg tetggagege
                                                                       60
accegteteg gagegettge getgeecege ggggaeaagg ceeggaeggg egeegeegge
                                                                      120
cgccagcgcc cgcccgtctc gcagcaagag aggtggagaa gagcgagtac ttgaqaaaqa
                                                                      180
agaggaagaa gatgatgatg aagatgaaga tgaagaagat gatgtgtcag agggctctqa
                                                                      240
agtgcccgag cagtgaccgt cctgcaggtg cccagcacca ccagcttaac ggcgagcggg
                                                                      300
gacctcagag tgccaaggag agggtcaagg agtggaccc ctgcggaccg caccagggcc
                                                                      360
aggatgaagg gegggggeea geeeegggea geggeaceeg ceaggtgtte teeatggeag
                                                                      420
ccatgaacaa ggaaggggga acagettetg ttgccaeegg gecagaetee eegteeeeeg
                                                                      480
tgcctttgcc cccaggcaaa ccagccctac ctggggccga cgggaccccc tttggctgtc
                                                                      540
ctcccgggcg caaagagaag ccatctgatc ccgtcgagtg gaccgtgatg gatgtcgtcg
                                                                      600
aatattttac tgaggctgga ttcccggagc aggcgacagc tttccaagag caggaaattg
                                                                      660
atggcaaatc tttgctgctc atgcagcgca cagatgtgct caccggcctg tccatccgcc
                                                                      720
tegggecage cetgaaaate tacgageace acatcaaggt getteageaa ggecaetttg
                                                                      780
aggatgatga coccgatggo ttottaggot gagogoccag cotcaccoot gocccagocc
                                                                      840
atteeggeee ceateteace caagateeee cagagteeag gagetggaeg gggacaceet
                                                                      900
cageceteat aacagattee aaggagaggg caceetettg teettatett tgeeeettgt
                                                                      960
gtctgtctca cacacatctg ctcctcagca cgtcggtgtg gggaggggat tgctccttaa
                                                                     1020
accccaggtg gctgaccctc cccacccagt ccaggacatt ttaggaaaaa aaaaatgaaa
                                                                     1080
tgtggggggc ttctcatctc cccaagatcc tcttccgttc agccagatgt ttcctgtata
                                                                     1140
aatgtttgga totgootgtt tattttggtg ggtggtottt cotcoctocc ctaccaccca
                                                                     1200
tgccccctt ctcagtctgc ccctggcctc cagcccctag gggactagct gggttggggt
                                                                     1260
tectegggee tittetetee tecetetitt etitetgitg attgtegete eagetggetg
                                                                     1320
tattgctttt taatattgca ccgaaggttt tttaaataaa attttaaaaa aaaaa
                                                                     1375
```

```
<210> 4941
<211> 747
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(748)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (711)...(390)
<223> similar to gi3023044 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4941
ttttttttt ttaatcaggt gaaaatattt tattttgacg tgctttttct tgagtgcctg

```
aatgtggtgg ctcttagggt aaccccagaa tcctcactgc ggcaacaaga cctggccacc
                                                                      120
                                                                      180
acceteacet egaceaceae ggeetteget geageeceae tetgaeteee egggggetge
                                                                      240
tcacqtqcca gcacccactg gccaagcatc ctccggcagg acccaagtcc tctgtattca
gaggccgacc ctgctttcca gagactcacg aggtggcaga gagtcaggct gtggcagggg
                                                                      300
                                                                      360
cccctgtgta tcgaggagag gaggaagagt ctgcagaggt ttctagggaa ggagatagtg
                                                                      420
tggaagtgac tgtggctctg gtcctgcctg ggaggagatc tacaggggag gggcctggcc
                                                                      480
ttgggctggc cctgccctgc gtgggatctg tgccctgcgt gggatccctg ccctgtgtgg
                                                                      540
ggtgcgtggg gtctgtgccc tgtgtggggt gtgtggggtc tgtgccctgt gtgaggtgcc
tgccctgtgt ggggtgtgtg gggtctgtgc cctgtgtggg gtgcgtgggg tctgtgccct
                                                                      600
                                                                      660
gtgtggggtg cttggggtct gtgccctgtg tgagctgcct gccccgtgtg gggtgcgtgg
                                                                      720
ggtctgtgcc ctgtgtgggg tgcctgccct gtgtgggatg catggggant tccccgcact
                                                                      747
ggacaactat ctacaaangg ggggggg
```

```
<210> 4942
<211> 1641
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (72)...(342)
<223> similar to gi3047103 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 4942 60 ggaattcgag gaaactagag ctggcagaaa gggtggacac agattttatg caactaaaga aaagaagaca atcaagtgag aaggaaaatg actcaggcac tttggacacg gtaggcgctg 120 tggttgtgga ccacgaaggg aatgttgctg ctgctgtctc cagtggaggc ttggccttga 180 aacatccggg gagagttggg caggctgctc tttatggatg tggctgctgg gctgaaaata 240 300 ctggagetea taaccectae tecacagetg tgagtacete aggatgtgga gageatettg 360 tgcgcaccat actggctaga gaatgttcac atgctttaca agctgaggat gctcaccaag 420 ccctgttgga gactatgcaa aacaagttta tcagttcacc tttccttgcc agtgaagatg gegtgettgg eggagtgatt gteeteegtt catgeagatg ttetgeegag eetgacteet 480 540 cccaaaataa gcagacactt ctagtggaat ttctgtggag ccacacgacg gagagcatgt 600 gtgtcggata tatgtcagcc caggatggga aagccaagac tcacatttca agacttcctc 660 ctggtgcggt ggcaggacag tctgtggcaa tcgaaggtgg ggtgtgccgc ctgggagagc 720 ccagtgaact gaccetteag getgagtgtg aagegtetea gaggeattte agaacetgag cttttggggg tttttaactg aagttggttg ttttatcttt cttgttttat aattcctatt 780 gcaacctcgt gcactgctcg agacacaagt gctgctgtag ttagcgctta gtgacacgcg 840 900 ggcctttggt gggtgagcgg gactgtgtgt gagtgtgtgc gcgtatgtgc gcacatatgt gtatgtgtgg agtatgtgtg tttgcttctc cgtggatgaa atagaaactc ctcattgtgt 960 gaccaggaat ggttaaatca tctttacaaa atgtgtgctt taactgttta caagtaaaac 1020 1080 ctaaagttgc aggaaacatt ttttatttcg taaagaggta ccaactgtcg ctgatgtgat atgtcagaac tgaagagtaa atctacttgt ttaaatgact tgacagtggt agtgctccat 1140 ttaataacag taataagtaa taaagtgttt ttatttgtta accagtttaa gtggatcctg 1200 tggtaactta aactgttgtt ctcatccctt atatggggca tttttcttta acaaagaatg 1260 gtttcagtga aacaatctag cagagaatta atgtcagaac čtttttaaat aatagtctga 1320 1380 ttgatacagt ttgtacttat ttcatcaagc ttttctaagc ttaaatattg catagcttcg 1440 agctgtatgg actatattat gaaagaatat gtaaagagaa catacagtaa tgcacagtcc 1500 ttaatttgtg tataatggaa agttatttac aatataacac tgtaaataag aaagcaaagt

```
ttatgggaaa attcaatatt atctttgttt ttgtttaaat atattttaa gataaaggca 1560 caaaaataaa agaagcgtat tactgggtat agtatgtgac tcctcttctc agactaataa 1620 attatctttt gaatccttaa a 1641
```

```
<210> 4943
<211> 1558
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1475)...(886)
<223> similar to gi5649176 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4943 ccacctcaga gcaaccacag ctgggcggtg ctgttcgacg ggcagagcgg ctgcatctgt 60 tacegeectg aggageacca ggtetgette etcegeetga tggaggacag tgategggag 120 180 accetgegge tgetggtgga tacetecaag gtecaagagg ettgggteee cageeaggae acceaceaca eccaggaget getggeagtg caggggagee tegaagtgga eccegeceag 240 300 gegggggett tggtgeageg cetgtgeatg aggaceceea tetaetggge eeggegagea 360 gaggggcccc ggagacagcg gctgatttat ctctgcatcg acatctgctt cccgagcaac 420 atctgcgtgt cggtctgctt ttattacctc ccagactgag cccccgacct ggcccagcct 480 ggcccgtccc caatccagtg ggctggccag gccacctgca ccagggagga cagctgctgg 540 cagggactaa taaacccttc cacctggcca tggtggtggt gttctctatg gaccgaggcc 600 ctgaaacgcg ggcagggagg ggcagagaac gcactagctt gggggtgggc accagcctca gacccctcag cagetttggg ccctcggccg actttcccag gcagtgcagg ctagcccagt 660 720 ccaggagtgt gcagcctggc ttgggtcgag ctctgtcaca tctggataag caactggggg 780 ctgagagtcc cagggcagcc tggcccagca ggtcaaggcg ccacaggggg ccatcaggtc cagetggege aggeeggeag gggagggtet getetgaeet gggtgetgea tgggteeete 840 cagetgecae caeetgeaee aggeagtece gaggggteae aggetageee ageacaetgt 900 cattgaaggc caggcagaca, acagcettet ggtggccgcc atactetete ttgatetete 960 cagtetecae acaccagage egggecaggt tgteegagga ageagtgaeg atgtaetggg 1020 agtecceega gaaggegeag ecceacatee ageegeggga ggacteeeeg gggttgeege 1080 tettgatget cageteegte ateagggaga agttggaegt cetecagate ttgeaegtet 1140 gatcagccga gcaggtggcg aggagcgtgg agtcggggct gaagcgacac tgcagggcgt 1200 agegegtgtg ggeagggate ttagtettgg ggatgagetg ggteaceteg teaceaatge 1260 cccccgtcag attccagaca tagcagtttc cggtgctatt gacagctgcc atgtagctgg 1320 1380 egtegggate gatgtgggeg gaegtgatgg agaceteggg eteagggate agetgetegt tgtggtctgt tttcaagtcc cagatgtgga tagccccgct ctggtcaccc acgatgagct 1440 ctgcctggtt ggggtgcagc accaggactc ccaggtgaat gccttggagg tcacaccgga 1500 ccgcagcatg attgctgctg caggttacca gcacatgcgg atgtatgatc tcaactcc 1558

<210.> 4944 <211> 355

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (357)...(215)

<223> similar to gil565257 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 4944

```
acttatagaa aaggtaaagg aaaccccaac atgcatgcac tgccttggtg accagggaag 60 tcaccccacg gctatgggga aattagcccg aggcttagct ttcattatca ctgtctccca 120 gggtgtgctt gtcaaagaga tattccgcca agccagattc gggcgctccc atcttgcgca 180 agttggtcac gtggtcaccc aattctttga tgtatgggcc gaggggcagg ctccaatttt caagcacacg aaggaaggat ccatcacctc caccaggatc tcgatcagca cgggctcgta 300 ctctgccaca aactgatcac actgcttctg gtaagggtct ggcaggaagc tgcag 355
```

<210> 4945.

<211> 1918

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (3)...(811)

<223> similar to gi5912153 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 4945

```
gcaaggtgac cgcccacgg cggccccagc gctacagcag cggccatggc agcgacaaca
                                                                       60
gcagcgtgct gagtggagag ctgccgcccg ccatgggccg caccgccctt ttccaccaca
                                                                      120
geggtggcag cagtggctat gagagcctgc ggcgcgacag cgaggccacc ggcagcgcct
                                                                      180
cttccgcccc tgactccatg agcgagagtg gggctgcctc cccaggcgcc cgcacccgca
                                                                      240
gcctcaagtc ccccaagaag agggccacag gtctgcagcg gcggcgcctg attcccgccc
                                                                      300
cactgeeega caccactgee etgggeegta ageccageet eeeegggeag tgggtggaee
                                                                      360
tgeeceegee eetggetgge teeetgaagg ageegttega gateaaggtg taegagateg
                                                                      420
atgacgtgga gegeetteag eggeeeegee ceaceeegag ggaggeeeee acceagggte
                                                                      480
tggcgtgcgt cagtacaagg ctgcggctgg cggagcgcag gcagcagcgg ctgcgggagg
                                                                      540
tgcaggccaa gcacaagcac ctgtgtgagg agctggccga gacccagggc cggctgatgc
                                                                      600
tggageetgg cegetggetg gageagtttg aggtggaeee ggagetggag eeegagtegg
                                                                      660
ccgagtacct ggcggccctg gagcgagcca cggcggccct ggagcagtgc gtgaacctgt
                                                                      720
gcaaggcgca cgtcatgatg gtcacctgct tcgacatcag cgttgcagcc agtgctgcca
                                                                      780
teceggggee geaggaggtg gaegtetgag getgggegee ggaeaagagg aggggggtg
                                                                      840
cagcgggctg gaggacggga cgtggggacgg agcgaggatg tggtgggggc tgcggggga
                                                                      900
ggatgcggag gggtttctgt gcaggacggg agtctcagag aggagacgga gtgtggggga
                                                                      960
gggagggccg gccacgcggt ggacagagcg agggtgccag ggtgacccga agaccgtcac
                                                                     1020
caccegacag caacgcaagt geetttgace ttgatttgga ettttetee ttttqcattt
                                                                     1080
ggtgctacag acttgagaca ccagcagaag ttgtgttcag cccggccccg ctgcgcctgt
                                                                     1140
```

```
ccgggccggg gctggcgccg gttgtgtttg tgtccacctt gccttctttg cagccaagca
                                                                     1200
qtttttgtqq aqtgggactt acctgcacgc cccaggggtc tttcaggatt caggatgact
                                                                     1260
                                                                     1320
tttcttttac aatggtttcc tctcggcaga gcccgggttg tggggggatct gtgtggggtt
                                                                     1380
ctcaacgcag atccatcctg gggtctcccg ggcagggatg gctgacctcg agtcccctcc
                                                                     1440
cttcccgaga acccgctctg tcccgagggc agctaacaag ggctgagccc caggtacagg
                                                                     1500
ttgcctcctc cacggcagga atttttacca aaaccacaag caaaaaacaa aacagaccac
                                                                     1560
cacgaccaac aacaaagatg gggggtaggg ttttgtaaag gttctgttag gttcatattt
ttatatcatt ttgcccataa atgcggaatt tgccgtggga atttgaagac aaatgatcta
                                                                     1620
                                                                     1680
tgtttttatg gttttctagg gaaggtgttc tgggggccgg gctctctcca gctgtgggag
gcctgctccc tctggggggc accctgggca gggtgggggg gccttgggag gcgcttcttg
                                                                     1740
ccaaatgcag acgaggggtg agcctgccag cgtttgcgac gtccccgcac gacaggctca
                                                                     1800
tactttctga ggatcgtgca tagcatagga cgtctgaacc tttgtacaaa tgtgtagatg
                                                                     1860
                                                                     1918
acatettget acagetttta tttgtgaatt aaagatgeat egatggttaa aaaaaaaa
```

```
<210> 4946
<211> 491
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (491)...(384)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4946
gctgaggaat tcggacgaga gaaataaaac gatctagtta ttgaaaaacc ttaaccccta
                                                                       60
tggacacact cacatacaca cacaaaacac gtattcccaa cgtgattttt cctaccgctg
                                                                      120
agetgetttt acctatgetg ttttetetae etggaaagee ceetettget etectaggtg
                                                                      180
tcactgccaa aatactacct ttcctataag gtccaggtat ataagcacca tggacattat
                                                                      240
ggagagagta gggggcatgg ggtccacatt ttgtatcact gtccaccact cccagcctgg
                                                                      300
accatctcac actgagtccc tttagtattc tgattcgtag tttacttatc ctaaaaaatg
                                                                      360
ggtcagtaaa cetettgeta tggcaeggtg getcaegeet gtaateecag caetttggga
                                                                      420
ggctgaggcg ggcggatcac ttgaggtcag gagttcgaga ccagcctggc caacatggtg
                                                                      480
aaaccccatc t
                                                                      491
```

```
<210> 4947

<211> 1500

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1501)

<223> n = a,t,c or g
```

```
<220>
<221> misc_feature
<222> (1503)...(1149)
<223> similar to gi4884370 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4947
ttttttttt ttgtacaata actgactttt gcaattattg tgtaatttac acaaggacaa
                                                                       60
cccccaatt cccacacttc gtttttatat ttctgccttc attattcttt caatatctac
                                                                      120
                                                                      180
gtcaacagaa atcgtttctc ccaataacat atgtggtttg atcctcagcc aggggcgcac
aggeectaca agagteecag eeeteeaaca egggacaeet ggaceeteee eeatttggac
                                                                      240
tgccagccct tggtctgttt tgttaacccg gggcttctnc ctgggccccc tggtcacccc
                                                                      300
ctggaagacc gtccggtaag gtagggaaat ggccaaacag gatctgtgtg atgtgtcaac
                                                                      360
                                                                      420
tctgagtaaa tccaagaggg ctgcctaggg agcccccagg ctggagggat tgagaggcca
qqqctqtqtc tggttccatt tcaaagaatg ctgtgatgca ttagcagcgt tctgctatgg
                                                                      480
gcaacaaccc attagaagca cctggaaggg gggttttggg aaacgggctc agaaaggagc
                                                                      540
aaggtgtgte egtteeatte ttgeettagg tggetgttee gttacceagg ctatgetgte
                                                                      600
tcagtggcca ggtggctgag gaggaagtct gaaggccgca tagttgcaag tggcttccct
                                                                      660
agggcctgca ggggacagca taggcccaaa gctagaggaa gcttggaagg gcgcccacgc
                                                                      720
tgggteetge ggggetetge atactgeagg ceaceatgge getageteet taccetetgg
                                                                      780
                                                                      840
agtetgtete atecaggaga agacagetgg etggeeteag agegttacat geaacteggg
tgaaaacatt tttacatgac acagacacac aatgggcttt acctctggat aaacttagaa
                                                                      900
actttccatc caaacgaaaa gggtgtatct tctgtatgtt gccaagaagc ctaaactgag
                                                                      960
tacaaggacg atcttacttt aatcaagttc cagaatgagg gtacacagct tcgaaaagca
                                                                     1020
                                                                     1080
gtctgtagca gaagatgcaa gggtgtgtgt agccatgttt ccagaatata ccaaaggaaa
                                                                     1140
cacacacaac cccagtgtgg cettttgcga accetegatg etgetecata etgggggcag
                                                                     1200
geggetaett egteeagetg actttgggaa tgtegtaatg eteegtgagt gtgteeaggt
gtetgttgåa gtectecact etetgettgt gggttttgga tgeettettt aggateettt
                                                                     1260
ccatttgccg cttctcctgc attttctcga aggccgcctg ggccggggtc cgcttgtcca
                                                                     1320
ggccgcgccg cttctcctcc tcgttctttt tgctcgttcc cattgcttcc aggagtttcg
                                                                     1380
ctttgtcttt gtccttcttt ttcttcttcc gcttggtcac tcccagctct gcgacgcctt
                                                                     1440
teagetteag gggteeettt tggaeetget egtaggeete catgaeaete teeagtgett
                                                                     1500
```

```
<210> 4948
<211> 885
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(886)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (860)...(446)
<223> similar to gi3885828 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4948 tttttgaggg tcaaatatct ttaaataaag tgccaggaac aataaatact gtacaggaag 60 agagtgcacg tgaacgtcca gatctgtggt ttcaacctcg agactccaag gacctgcaag 120 gggggtggac aagggacccg ggatcaggga ggctccgggt agacaagagg ggcaggactg 180 gggttgcaga ggcaagggcc caggtaagtg ggctgaggga tcccagccac agtaggttcc 240 gtatcttggg atggaaggaa gctaagggct cccccaggga tttggccaaa ctagcctggg 300 gtgagageet gggeeaaggg teaagggtea ggateeeaga ggagggeea gggetggaag 360 atccaggaag cactggcctg gtttgggagc ctggggttaa aggggagccc gtggaggccc 420 caggggtgtg gtgacccagg ggctcacgag tagctctgat gctgttggcg ccggcgggca 480 gagegeatet tetegaaceg ggeeteeate teeteeagea etegeggtgt gtaacggaca 540 accagettea eegageeetg ggeegeette ageageteea eegeettete atgetgetea 600 ccctcaacgc tcacaccgtt caccgacaac agttgatccc cacgcttgag gcctccatgg 660 eggteageca caceceetgg gatgaceegg gagatgtaga tgggegagtt ttgetetttg 720 ccacccatga tgttgaagcc taggccctca tccgtcttgg gtagctccac taccctggga 780 tgtgcgtggc cctcgctggc tgtgaaggca gccactgtgg cctttgctgt ggcatgggct 840 eggatetege tegtgeegaa tetgeagega atteettntt ceaca 885

```
<210> 4949
<211> 1258
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1256)...(586)
<223> similar to gi1205993 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4949 ttttttttt ttattggact gtaggttttt attaaaacaa acatttctca tagctctaag 60 caaagcatta gaattcatca agcggactca catcttttct ctgcacagag agggctgaaa 120 agggagagaa agtcccttat gtatgtctag atttggtaaa gcgaaggatt tcaqcqaatq 180 agteactgag getatacaeg tittgeaaatt gtaaggeact ggegggeaga gageacagat 240 anaggaette tggggteece cateetgtee ageaacetee cageteacae ettagettet 300 accaagaagg gtgaacacag catecetget atetteacte agaceceaga agacacagga 360 aaccgcacag ctccactccc accataactt attaggagat aagtcacatt ttatcaactt 420 gccatcgcgc ctcctataga ttatacttcg gtaaacccaa tctgtataaa ttcctttgta 480 ctttgtgcac tttaaatgcc acgattgtga atcacacaag cattgcccaa tttgttgaaa 540 gcatttttac tggaacctca aaggcccacc atgtggggag caattattt ttaataccca 600 ctgggcagga cacgccggtg cccccaaggc cgcagtagcc attggggttc ttgctcaggt 66,0 actgctggtg gtagtcttcc gcatagtaga aagtctgtcc ctcccggatg tcggtagtga 720 tggggccgaa gccgtgctct gaaagaacct tttggtagtt ctctttggag ctcagggctg · 780 cctccatttg cttggcagag gtcgggtaga tggccgagcg gtactgagtg ccatggtcgt 840 teccetggeg catacettgg gtegggtegt gatteteeca gaagacettg ageagtteet 900 caaaactcat gtgttctggc tggtacacca ctcggacgac ttctgcatgg ccagttttt 960 ctgagcagac ttctttataa gtaggatttg aagtatagcc tcctgcaaaa ccaacttgag 1020 ttgaatacac teettteaag acceagaatt teettteage teeceagaaa cateeeatte 1080 caaatacagc catctgtgtt ccctctggga aaggttcgac tgttctgttg ccattgacat 1140 gatgtttggc cgctacaggg gtctgttcct tccggcccgg caaggcctcc tgggggctga 1200 cgatgttcga ggccgagttg cccatcctcg ggacgggaaa gaggctgtgg aggaggag 1258

```
<210> 4950
<211> 1188
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1189)...(496)
<223> similar to gi2815610 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4950 ttttttttt ttattattca ggcaatttat taaacattac ctatagaata ttatgatctg 60 tattttacag aagttaaaaa gtgatgtatt agtattcata acaactgctc catgcaggag 120 180 taatagaagt caacattaag cccaactcta ttttcagacc aaccatgcaa ctttagatca gaggacacat gggactotgo atottaatto otaaatttac agtoaaagac attttcagag 240 300 ataagtatta tgaattcaat aagaatctaa agtaagttet taaggeaaat agetataaaa 360 qaqaaqaatc cttaqtctct catcttctaa aaacagcttc acaaataatt tggaaaatca 420 qcctaaaqqt aaataqaaac tqcatttccc ctccattctt gaagccaatc tttttcaaga aatgactaag cagcacctgt tgttgaagac agcaataaag cctgaacctg acactcaagc 480 tttggtacag gatcagtttt ctggcttgga ctggtcagga gtcacttcac tcagaatctt 540 cattagtgat tttaagegat tgtgegttag cactatette tettteaget etgeaatett 600 ttctgataga/ggaacatttt gaatatccat ctctgatgca tttactatgg cttttgtttt 660 taagagatag cacaccattt tgtcactgga aaggcagaag tgacctctca aggcagccag 720 ggcagcatgg gtagaataca gatggaaacc aacgggaatc ccacaagaac cacagaataa 780 aaggttgtaa gtactgcctt tgagtgaacc ttcaatgcca actaggaagg gcgcttccaa 840 aacgacgtta tttgtaactc tggagaagac cacggccccg agggaccgcg acaggtccca 900 ggcgaggtgc accgagtcgg cgagcactgc gtgacactgt gcgcactgga acacagcgca 960 ceteteagge tgeageeaag aeggeagetg egggeeggeg getggeteet eageeeeeag 1020 ccctgcgggg ccgagcggcg aggacccctt caccacctgc gtatcccact ccatggaggt 1080 cgtaaaagaa gcttggtcaa tcgccctctc agtgccacca caaaagtccc cccggggcgg 1140 1188 cgttgcacaa cgtgagcgat gccgcagcgg ctgagccgcc atcttccc

```
<210> 4951
<211> 1251
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1194)...(366)

<223> similar to gill77358 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4951
                                                                       60
tttttaagag gttcatgaca caaatatatt tatattaggt gaatcaatca cccaggatac
ccaagatctg atactttcac aaactgcttg gaggcaactt aagtatggaa gaagcttcag
                                                                      120
aaccagccca getttetget etetggetee aggetgeate etttttaaet atttaatgtg
                                                                      180
                                                                      240
gegtggaaaa tgteageata atgaggettt eteateteaa tagagaacet aggaaggaca
aggccgaatt aaaaaaaaaa tcttcattaa agaatttaat agggagttga ttatgttgta
                                                                      300
gaatcatatc gtcctattct gtgacacatt agaaacataa actttagggc tttttcatct
                                                                      360
ccacagcata gaggtctgat cgcttctgtc taaaaacggg gatttgctgg cgtatttcag
                                                                      420
ccagcttett caggtetatg tetgaataca egattgette ttetgtgeea getttggeta
                                                                      480
gaaceteece ccaagggtte accaeggtge tgtgteecea ggcaacatag gaggetttgt
                                                                      540
cateceggge aggagagget gtggecaeat acacetgatt ateaacagee eggetteget
                                                                      600
gaagtaactc ccaatgggct ggtccagtgg tcagattaaa agctcctgga tataccaaca
                                                                      660
gctggcagcc tctctgtgcg tagatttgtg caagctctgc aaaccgcatg tcgtagcaga
                                                                      720
tgcccagacc cactctgcag taaggagtat caaatgtgga gaaactatca cccggactca
                                                                      780
atgttttaga ttcttgaaat gtaatttttc caggaacatc aatgtcaaac agatggatct
                                                                      840
ttctatactt tgctagtaaa gttccatcag gcccaaacac agcacaggtg ttatataatt
                                                                      900
teccageate etetteaggg atagageete caatgagata tatgetgeat teetttgeta
                                                                      960
cttcagaaag cttctgtgtg gattcaccag gaattttctc tgcatattca ggaaaatatt
                                                                     1020
tegetecata tggagaatta aageatteeg geaaagaaae tattttgget eettgegttg
                                                                     1080
ctgcctcccg gatgaagcta caagcgcgag tgacgttatc tgatttgatg gaagaaatct
                                                                     1140
gaagetggat gagggeeaag eggaaagagg teatgaetet geagaeaage accaeetgeg 🐇
                                                                     1200
gcgcggaatg agcgctggag atccggcgga ccgcggcgtc gctacacgaa a
                                                                     1251
```

```
<210> 4952
<211> 1073
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (211)...(705)
<223> similar to gi687809 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4952
tcgctgtctc gggccgactc tgacccccat gggccacaca cctgtggcca tgtcctgaat
                                                                       60
gtgatcattg gctctaatgt gctggcgcta gctgaggccc agcggcaggc cgaggcactg
                                                                      120
ggctaccagg ctgtggtgct gagtgcagcc atgcaaggtg atgtaaaaag tatggcccag
                                                                      180
ttctacgggc tgctggccca tgtggctaga acccgcctca ccccatccat ggctggggct
                                                                      240
totgtggagg aagatgcaca gotocatgag otggcagotg agottgagat occagacotg
                                                                      300
cagctggagg aggctctgga gaccatggca tggggaaggg gcccagtctg cctgctggct
                                                                      360
ggtggcgagc ccacagtaca gctgcagggc tcgggcaggg gtggccggaa ccaggaactg
                                                                      420
gccctgcgtg ttggagcaga gttgagaagg tggccgctgg ggccgataga tgtgctgttt
                                                                      480
ttgagcggtg gcaccgatgg gcaggatggg cccacagagg ctgctggggc ctgggtcaca
                                                                      540
cctgagcttg ccagccaggc tgcagctgag ggcctggaca tagccacctt cctagcccac
                                                                      600
aatgactcac ataccttett etgetgeete cagggtgggg cacacetget geacacaggg
                                                                     660
```

```
atgacaggta ccaatgtcat ggacacccac ctcttgttcc tgcggcctcg gtgatggcat 720 aggtcacatt ttgggagttc agaggaggcc tacaagggca aggtcagatg gcagagcaag 780 gttggtcetc agggcctctc taagcettag ggcccctcct ctccttggcc ttggctgttt ggttaactgt caccttccac tcagggcctc tgctctatat ctattccctt ccagccagac gggcttcccc ctacccctga ggatgaggac aagcccctcg gccagttcag 960 cgttcccgtg cttctccctt gggcagcctc tctcttgagc ccctcaccct gttctttct 1020 gtgaagcgag aatgtctgaa aataaatagg accatgccat gggaaaaaaa aaa 1073
```

```
<210> 4953
<211> 658
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(499)
<223> similar to gi4760473 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4953
ctaatgagat aatcaaatat aacctgcaga agaggactgt ggaagatcga atgctgctcc
                                                                       60
caggaggggt aggccgagca ttggtttacc agcactcccc ctcaacttac attgacctgg
                                                                      120
ctgtggatga gcatgggctc tgggccatcc actctgggcc aggcacccat agccatttgg
                                                                      180
ttctcacaaa gattgagccg ggcacactgg gagtggagca ttcatgggat accccatgca
                                                                      240
gaagecagga tgetgaagee teatteetet tgtgtggggt tetetatgtg gtetacagta
                                                                      300
ctgggggcca gggccctcat cgcatcacct gcatctatga tccactgggc actatcagtg
                                                                      360
aggaggactt gcccaacttg ttcttcccca agagaccaag aagtcactcc atgatccatt
                                                                      420
acaaccccag agataagcag ctctatgcct ggaatgaagg aaaccagatc atttacaaac
                                                                      480
tccagacaaa gagaaagctg cctctgaagt aatgcattac agctgtgaga aagagcactg
                                                                      540
tggctttggc agctgttcta caggacagtg aggctatagc cccttcacaa tatagtatcc
                                                                      600
ctctaatcac acacaggaag agtgtgtaga agtggaaata cgtatgcctc ctttccca
                                                                      658
```

```
<210> 4954
<211> 570
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(247)
<223> similar to gi4539520 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4954
                                                                       60
ggggattatg tagaaagata tgatcccaaa acagacactt ggaccatggg ggctcctttg
agtatgecea caaatgetgt tgggggetgt eteettggtg acagattata tgetgatggt
                                                                      120
ggctatgatg gacagacata cctcaacact atggaatcct atgacccaca aactaatgag
                                                                      180
tggacacaga tggcttcctt gaatattggg agagcaggtg cctgtgtggt agtcatcaag
                                                                      240
caaccttgac ttattgatat tttacttgga aagattttac ttgctggagt ggttattttt
                                                                      300
atattgaatg gcaagaatga gaacttccag agatgaaaac tettcaagaa caaggatete
                                                                      360
tgtagcgtta cctactgatg ttgaaagagt tagtagatca aacagaatag taggaaacaa
                                                                      420
                                                                      480
gaaaacatta aacttataca ggaaaaatgt ctggccatat gttagttagt tcgggaatgg
                                                                      540
ttattggtaa tttgttttgt attatagcat acaataacta gagttaccaa aggcttgttt
                                                                      570
tttcttgagc agttgaaagg agagaccaat
```

```
<210> 4955
<211> 1371
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1285)...(757)
<223> similar to gi3417425 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4955
tttttttttt ttaaaaaggc acataaaaat atttttattt tctataaata cattaggaaa
                                                                       60
tgtatttctt cccaacccag tccaccccat taactcaatt ttttctacat aaaaaagatg
                                                                      120
ctaataccac cctcacctgt gactgctaaa cagagaaaga ttgcctggac taggcattat
                                                                      180.
cetectagtt ggaaataaag geeetttetg ggggcaggaa gtgggatttt caggggaece
                                                                      240
tacagacgta ggcagccaag agtcaaacaa aacaagcata tgcaatagtc ataattatgc
                                                                     300
tagtatgaca gtatgaatta ggtgactcag ccaggcacat acaggagttc ggagtgggga
                                                                      360
cagtggaage ccacaaaact ccatgtttgg gccatcagta gacacttggt ctgagaaaca
                                                                      420
cagtaaaatg tctgcccggg tagtcacgat cattctagta tgaggtagac aggaagcaga
                                                                      480
gcagggccag gaaatggaag gggccaccca ggccctcagg agtccctgac aagggaaggt
                                                                      540
ccctccatgc tctctgaggg tggcggggct ccaaagatcc tgggccagga gccctttgtt
                                                                      600
ggagegggee tigteetggg eagitgeeag gegageeegt teaegteeee etggeegtge
                                                                      660
tgctttacgg gccctcagtt cctgctcagt aggacgctgg gcaaatgtcc aggagccatc
                                                                      720.
tgggcgagca gggtccccat cggccgcaag aaagcgttgt ccccgttcca cactttgaag
                                                                      780.
atagaagteg gteteaeget tggettgage aaceteeget eteaageget geetgegeae
                                                                      840
etggegetea aaggegaggt getegetgag gtgggaecag gtgaaacggt geaagtaett
                                                                      900
gaggttccaa agatcataac ggaaggggct gcgcctgcgg gcacccatag gcgtgttgtg
                                                                     960
tagactggcc gccacgcgct tggctatgcg cttgtcacgg aactccaccc atccctcggt
                                                                     1020
gtagteettg gtgtaggade getttittee teeggeaget getgetgeet tettettgeg
                                                                     1080
teteacgaae eggteeteag eetgaaagaa gaegegteeg acetegeeat aggegetgag
                                                                     1140
aaggttgcgg acgtgcaggg gccggaagcg cggcgggata tggcccaggt acacaatacc
                                                                     1200
tggcactacc cgtttcttgc tgccacaggc cgcttcttcg gattcctcct gctcctcctc
                                                                     1260
cgcatctagt gtctgttctg tcccttccag cggctcttgc tccgttgcgg ccttctccga
                                                                     1320
tteetetgee teeatgttga etgacaegag eggeetegtg eegetegtge e
                                                                     1371
```

```
<210> 4956
<211> 1496
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1459)...(524)
<223> similar to gi1280135 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4956
                                                                       60
ttttttttt ttgggtttgg tttggttttg ttttgttttg tttattgtgg taaaatacaa
aatctaccgt cctacaagga gggtggcgtt cagtaccttc accacgccgt gcagccatcc
                                                                      120
                                                                      180
catctgattc cagaacattc tcatcaccca gaaggcagcc ctgtccccat tatgtcacct
                                                                      240
agtcacccc aggtccccct ccccagtccc ggcacccacg aatcctctcc ctggattctg
tgggattggg tctgtccggg gacattttca taggaagtgg ggatcacagc ggtacccttc
                                                                      300
tgtgtctggt gtctctcact gagcgtgaca tcctcaaggt gcatccgcac tgtggcctgg
                                                                      360
                                                                      420
gtcagagett egeaceteet tgtggetgag teteatteea gegegtgggt gegtgggtgg
                                                                      480
ccgcgccgtg ctgatcccct caccttcact gggtgttcgg tgttctccgc ctcgggctgt
cacaaatcgt gctgctgtga gccactgcgt gcaggtctca tcagcgtcgc aggcgggtcg
                                                                      540
gccacagcag gaggctacag agacacaggg cagcggccac gcccacgccg cccgtcacag
                                                                      600
ccaccatege ccagtggtaa aageteaege aggeeetgea gcagagetet gaggggcaag
                                                                      660
ggtgcagget etggatggee atgaetgeea geccattgge cacettatee aagaagetea
                                                                      720
tggagccgta cacgaacgct ccgctgttcg tgtggggacc gatgaggtcg gccgtcatgg
                                                                      780
                                                                      840
ccagcgaggt gacgaggatg gtggcacagc cagcacccag cagcacagcc gctgcgtaca
cggccacacc cagtccctcc gccagcgcca cccaggcggc aaaggccagg atcaccagga
                                                                      900
                                                                      960
ggcctgagaa gtaggtcatg ttcctcccaa tgcacttgtt gatgggcttc atgaggaagg
aggacaagaa geegetgagg tacateaeca ggggaatggt egegatgaae ttettgggea
                                                                     1020
ggtggagcga gtaggtgagg tacatggcca tgtaggtctg ggacaggttc acgatgagcc
                                                                     1080
                                                                     1140
tggtggtcat gtacagtatg cccacctggt agaaagccgg ctcccggagc cagtgcttcc
                                                                     1200
agagcagcag gggctgggcc gtggcagggg ccaacagggg ggtgtgctcg cctggctcct
                                                                     1260
cegeatgegg ceggegeete teeegggtge ceaggtggaa tageagtgag aacaeggege
cgacacccac caccagcagg gacaggttcc ggaacacggg cacgtcctgg ccccccagct
                                                                     1320
                                                                     1380
ggtcgctgat gctgatgtct tgggtgggct ccaccegcga cgagccctgc aggtgcagca
                                                                     1440
ggagccaggc ggcgccgtag acggtgatgt tggccaccac ggtgaacgca tacctgagtg
ccgtgagctc caccttctcc ggacgcgtgg gtcgacccgg caaaacggag cggctc
                                                                     1496
```

```
<210> 4957
<211> 729
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(559)
<223> similar to gi498721 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4957
ggaaaaacct ttagtcgtgg ctcagaactt actcaacatg agcgaattca cacaggtgag
                                                                       60
aaaccctatg aatgtaagga atgtgggaaa tcttttattc gtggttccca gcttactcaa
                                                                      120
catcagagaa tccatactgg tgagaaacct tatgaatgta aagaatgtag aatggccttt
                                                                      180
actcagagtt cacatettte ccaacateaa agaetteaca etggtgagaa accetatgtg
                                                                      240
                                                                      300
tgtaatgaat gtggaaaggc ctttgcgcgt ggcttactac ttatacaaca tcagagaatt
catactggtg agaaaccata tcaatgtaag gaatgtggga aagcctttat tcgtggttca
                                                                      360
cagttgactc aacatcagcg aattcacact ggagaaaaac cctatgaatg caaggagtgt
                                                                      420
ggcaaggeet ttagteatgg eteteagett actetacate agagaateea taetggtgag
                                                                      480
aagecetatg aatgeagaga atgtagaaag geetttaete agagtteaca tetttetegg
                                                                      540
catcagagaa ttcatactgc tggagctccg ttactctcat ggggactttg agaatggtat
                                                                      600
                                                                      660
ctgggtgtta tggatcatgg agcagaaata cagaaggagt ctgcaaccct gatgactttg
tggaacagcc atactagctc tggtctgctt gcctcctgtt tctctttaaa taaaattaaa
                                                                      720
catcttaaa
                                                                      729
```

```
<210> 4958
<211> 1618
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1619)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1)...(740)
<223> similar to gi2852615 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4958
cccatggcca cgggtgatgg cgccaagacc ctggccatcc acgtgaaggc cctgacggca
                                                                       60
gactccatcc gcatcacgtg gaaggccacg ctccccgcct cctctttccg gctcagttgg
                                                                      120
ctgcgcctgg gccacagccc agccgggggc tccatcacgg agaccttggt gcagggggac
                                                                      180
aagacagagt acctgctgac agccctggag cccaagccca cctacattat ctgcatggtc
                                                                      240
accatggaga ccaccaatgc ctacgtagct gatgagacac ctgtgtgtgc caaggcagag
                                                                      300
acageegada getatggeed taccaccada etcaaccagg ageagaacge tggeeccatg
                                                                      360
gegageetge ceetggeggg catcategge ggggeagtgg etetggtett cetetteetg
                                                                      420
gtcctggggg ccatctgctg gtacgtgcac caggctggcg agctgctgac ccgggagagg
                                                                      480
gcctacaacc ggggcagcag gaaaaaggat gactatatgg agtcagggac caagaaggat
                                                                      540
aactccatcc tggaaatccg cggccctggg ctgcagatgc tgcccatcaa cccgtaccgc
                                                                      600
gccaaagagg agtacgtggt ccacactate tteeceteca aeggcageag cetetgcaag
                                                                      660
gccacacaca ccattggcta tggcaccacg cggggctacc gggacggcgg catccccgac
                                                                      720
atagactact cctacacatg atgeocycec accegggetg eccegeetea geoceagetg
                                                                      780
ccctggcgtg gccatgtggc tttgcccagc ctgctgcaat ccaagagagc aaggaagaga
                                                                      840
```

```
900
aattecatgg gtgactttee teegeagaaa geaaagtttg gggagggetg aegattttgt.
                                                                      960
agaacacaac agtgacaatt ttttttaaaa gaatagaagg caggaggggg aattcgacat
                                                                     1020
tgttgaagac ataatttata ccaagttatg cccagttggg gagggaagga ctaaaaataa
                                                                     1080
tattgcaggc agggctgggt tgggtttttt ttttttcccc cctgaactgg aaggatacta
cctgtacaac atcttgtgga cacctcatgc tttgttcaag gccatcacaa aggaaccgcc
                                                                     1140
                                                                     1200
cagggagaag cagccggctc tcaaagctcc cacgcagttt tccccgccac tggccactcg
ctggcgaccc gatggaaggt tttcaggctc ctcacaaagg agagagggaa gaaaagatct
                                                                     1260
tttgccctgg agatatggtc ctgaaatctc tcccctggct tattccatac catttccctt
                                                                     1320
gcagatttgc agaaacatgg catctttcac tgcattcttt gaacaatcat gtagtcgatt
                                                                     1380
                                                                     1440
aaaaaaaaa aaacaaactt ttttttccta ggctgaagcc cttttaagtt ccatgccccc
ccctccgaaa aacccccggg ggaagccgta actttccctg ccacctggag gggcatttgt
                                                                     1500
ctgcctgtct atccctgggg gggggcctct aaatacagag gggtaaatag agccacatgc
                                                                     1560
acggtcctta ccgttttttt tggngcagtt cttaccattt cctgaacaat aaaatggg
                                                                     1618
```

```
<210> 4959
<211> 2384
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (332)...(1831)
<223> similar to gi2662364 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4959
                                                                       60
agacaacttg atagecacag ceetttgtet ttetggeage gggteteagt etgatttgaa
ggatgtggcc agcacagcag gagaggaggg ggacacaagc cttcgggaga gcctccatcc
                                                                      120
agtcactcgg tctcttaagg cagggtgcca tactaagcag cttgcctcca ggaattgctc
                                                                      180
tgaagagaaa tccccacaaa cctccatcct aaaggaaggt aacagggaca caagcttgga
                                                                      240
tttccgacct gtagtgtctc cagcaaatgg ggttgaagga gtccgagtgg atcaggatga
                                                                      300
tgatcaagat agetetteee tgaagettte teagaacatt getgtacaga etgaetttaa
                                                                      360
gacagctgat tcagaggtaa acacagatca agatattgaa aagaatttgg ataaaatgat
                                                                      420
gacagagaga accetgttga aagagegtta ccaggaggte ctggacaaac agaggcaagt
                                                                      480
ggagaatcag ctccaagtgc aattaaagca gcttcagcaa aggagagaag aggaaatgaa
                                                                      540
gaatcaccag gagatattaa aggctattca ggatgtgaca ataaagcggg aagaacaaa
                                                                      600
gaagaagata gagaaagaga agaaggagtt tttgcagaag gagcaggatc tgaaagctga
                                                                      660
aattgagaag ctttgtgaga agggcagaag agaggtgtgg gaaatggaac tggatagact
                                                                      720
Caagaatcag gatggcgaaa taaataggaa cattatggaa gagactgaac gggcctggaa
                                                                      780
ggcagagatc ttatcactag agagccggaa agagttactg gtactgaaac tagaagaagc
                                                                      840
agaaaaagag gcagaattgc accttactta cctcaagtca actccccaa cactggagac
                                                                      900
agttegttee aaacaggagt gggagaegag actgaatgga gtteggataa tgaaaaagaa
                                                                      960
tgttcgtgac caatttaata gtcatatcca gttagtgagg aacggagcca agctgagcag
                                                                     1020
cettecteaa atecetaete ceaetttace tecaececea teagagacag actteatget
                                                                     1080
traggigitt caarcragic colottegge toologgatg contictora tigggraggi
                                                                     1140
cacaatgece atggttatge ceagtgeaga teccegetee tigtetttee caateetgaa
                                                                     1200
ccctgccctt tcccagccca gccagccttc ctcacccctt cctggctccc atggcagaaa
                                                                     1260
tagecetgge ttgggttece ttgteagece ceaeggteea caeatgeece cageegeete
                                                                     1320
cateceacet ecceeagget tgggeggagt taaggettet getgaaacte eccggeecea
                                                                     1380
accagtagac aaactggaga agatcctgga gaagctgctg acccggttcc cacagtgcaa
                                                                     1440
```

```
taaggcccag atgaccaaca ttcttcagca gatcaagaca gcacgtacca ccatggcagg
                                                                     1500
                                                                     1560
cctgaccatg gaggaactta tccagttggt tgctgcacga ctggcagaac atgagcgggt
ggcagcaagt actcagccac ttggtcgcat ccgggccttg ttccctgctc cactggccca
                                                                     1620
aatcagtacc ccaatgttct tgccttctgc ccaagtttca tatcctggaa ggtcttcaca
                                                                     1680
tgctccagcc acctgtaagc tatgtctaat gtgccagaaa ctcgtccagc ccagtgagct
                                                                     1740
gcatccaatg gcgtgtaccc atgtattgca caaggagtgt atcaaattct gggcccagac
                                                                     1800
caacacaaat gacacttgtc ccttttgtcc aactcttaaa tgacggacct gactggggag
                                                                     1860
gaagaagaag agaaactgat gtgaacagga agcgcgggtt caagatttct aaaactctat
                                                                     1920
atttatacag tgacatatac tcatgccatg tacattttta ttatataggt aatgtgtgta
                                                                     1980
tagaaagtct gtattccaat gttcgtaaat gaaactatgt atattatgca gaaacagtct
                                                                     2040
gttccccctc atcttgcaat tcctttgggg gatgcagatt gtagggaaga tgatgtttag
                                                                     2100
tttggccttg aaattatgat atccctgccc agggctgttt tcaaatacaa tataaaaacc
                                                                     2160
acctaggaac etgetgttge tetaaggeea ttetgetttg gtttggetea geetetagte
                                                                     2220
catttcctta aggctcatgt atgcagattt aaagcctggt gctcacccac tgtccaacca
                                                                     2280
gatgccttgc ttaccgaaag cctccagaag cctcagtatt gttttagcca ctctactcca
                                                                     2340
aatggataaa atgagactct gattgagaaa aaaaaagtaa aaaa
                                                                     2384
```

```
<210> 4960
<211> 1695
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1696)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1312) ... (667)
<223> similar to gi3875410 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4960
ttttttttt ttgcaacctt gaatttattt tttattgaaa cacagtacag aaaacaccaa
                                                                       60
acgtcactcg acagcagtga gctcatagct gtaatggagt tggccccaga tgccaaacca
                                                                      120
cetetgetga ggtgtgaett cetetggagg gtgacatggt caaggaaagg gaaggtgtte
                                                                      180
tetgteaaat teagagaeea tgtgeacete caacaaaate acaeteeeta caagttecag
                                                                      240
tgtgccccca gtgggcaccc cgtgggcaca tctttgacaa tggggaaggg gttaacggga
                                                                      300
agtaggtggg gggacatcca accccaatgg ggcacatacc caggaatggg aatgtaggct
                                                                      360
getgagtett ettggagaag aagagagage tatgeecaca gtteagettg tggggeecet
                                                                      420
gagacaaggg cccacagtgt gcggagagga ttccaaagga ggaggaggat ggtgacatgg
                                                                      480
acagtgactc tggggctgcg ggccacgatg tggcaaaaat ggagcagctg ggtggaggca
                                                                      540
agatgagggg ctgaggagtg gaaagacacc agaatggggc agggagagca attccactca
                                                                      600
gagtggagca gggaacagcc agcatattag ggccaagacc cggtcagcca gcttcaaccc
                                                                      660
cttcacacgc aggatgagct catggaggtt gatctgccat aagttgaagg cctcgctgaa
                                                                      720
agagatetgg gteettetga agaatgaaca ggtattette ttettgtget eagetagege
                                                                      780
tetgatgeag caacgtgaca tgttgagaaa ggagetggeg etggegeggg tgeecaggge
                                                                      840
ggcctcaatg ccacgcagca ggtcgttggt cttcaagatg agcagcatct ggcgcggcac
                                                                      900
gtggttgagg agatggctga tctgggggag gtagttggcc gcgttgttgc gaatctctaa
                                                                      960
```

```
gtcctcagtg gcagtgacgg gagettggct gatgcctctg ttgaccgagt cccacgatcg
                                                                     1020
egeegteage atgeaggeaa acaaggggta gagateeeeg geteeeagte getggetgta
                                                                     1080
ctccttcact ctcttcatgt cagtccagat cagagactgc cagaggtggc agtaattcag
                                                                     1140
geggaattet teegtgagea tetggtaaag cecatggtee aacaggacaa teteegeett
                                                                     1200
tecegtgeeg gggtgettee geaccagtae attgeegggg tggggatege agtgeacgaa
                                                                     1260
gccattgacg aagatcatct cactatacat cttgcccagg tggcgtgaga tctgaaagag
                                                                     1320
aagaggggca ggtgggagct cctctccact cacatctatc cgagggacct ctgtctggtc
                                                                     1380
tctcaatgtg gtcactttta aggggaggcc agagaaaatc ggtgggccgg agcggttgtg
                                                                     1440
gtgggagtga ttgtttgaga tgacatactc tttgagttta agatttctta actttagctg
                                                                     1500
caccttagaa tcatgaaacc.atgtgggcgg tacaaggcac cagtattttt taaagttcga
                                                                     1560
ggtgacgtga acatgggatt aggtaggaga actgcactct ccacctccca cacccgcccc
                                                                     1620
ccgacttgtc ccccatttct ctcccctcgt gccaagcttg gcgtagttat ctaatagcgt
                                                                     1680
tttcaatnng ccccc
                                                                     1695
```

```
<210> 4961
<211> 958
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (961)...(156)
<223> similar to gi4680229 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4961
ttcgtgccgc aatacattta ttattttatc acatatttac attccagtag gcagcctgtc
                                                                       60
cccctgtcca acaaggccct ttggtcctca ctggtcggcc tgctccagac ccccaggtgc
                                                                      120
aggegegtőt ceggagtéga ggéteegega tőtéagaegt teágéaggag gggeeggtége
                                                                      180
tectegtetg cagegteget gggaggaatt teataaatga caaacaggga ggagtacagg
                                                                      240
cagcccagga aggacacgag gctggagaag tacatcaccc cgttggcact gcccacggcc
                                                                      300
gaggtcaggg gccccaggac cagggagacc agaatctgag ccaggaagta ctggcagctc
                                                                      360
agcagagaga tgtccacgcc catgccccgc cgggtgccgt ccgcactgga ccctgcaaac
                                                                      420
ttettaetet gatagtaate geagageage gagtaaggea aggtgeacag ggtggaaaat
                                                                      480
aaaatcccgt aggttatgca gagcgacagg accacgtaga ggttcctgga gagggtggca
                                                                      540
agcccggtcc ccaggccgaa ggcgagatag gcgatgaagt agagggtgcg gacgctgagg
                                                                      600
aacteeteea getteteeag gatagetgag tagaaggeag caetgaagge gtagatacae
                                                                      660
atgececage ageceatggt caegeegetg ttgtaettet gatacgeete tgatgtgtge
                                                                      720
ggggccttgg ggtccccctg aaacaccacc tcgcccatga agtctgtgta gaagagcaac
                                                                      780
atcccctcga atgagageca ccccaggaag tggttgacgc agagggtgcg tagcgccttg
                                                                      840
ggcatgttgc agatggtgga gcagaggcgc cccacggaca gaggctgctc cgcgcgctcg
                                                                      900
ctggageceg teageteget eteataette acgeegttga geaggatatt ggeeacee
                                                                      958
```

```
<210> 4962
<211> 1004
<212> DNA
```

<213> Homo sapiens

<220>

<221> misc_feature

<222> (76)...(684)

<223> similar to gi4884435 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 4962 aaatgettae gecaagettg geacgagget ceetecaget tagettteae eeggtggtgt 60 tecegggagg agagggegga gggeggaggg aaettgeaee gaageateae tegagaeeee 120 aaacctccag gcctgaggcc cagccagcgc ccaatggatg acaaaaagaa gaaacggagt 180 cccaageest geetggeesa geeageesag geeceaggea cactaeggag ggteeetgtg 240 cetaccagee acageggete ettggeeeta ggaetteete atetgeeate eeceaageag 300 cgggccaagt tcaagagagt aggcaaagag aagtgccgcc cagtcctggc tggaggtgga 360 ageggetetg caggeacgee cetgeageae teetteetga eegaggtgae tgatgtetat 420 gagatggagg ggggactect gaacetgete aatgatttee actetggeeg getgeaggee 480 ttegggaagg aatgeteett tgageagetg gageaegtte gggagatgea ggagaageta 540 gcccggctgc acttcagcct ggatgtgtgt ggggaggagg aggacgatga agaggaagag 6.00 gatggggtca ctgaggggct gccagaggag cagaagaaga caatggctga ccgtaacctg 660 gaccagetge ttageaatet gggtteatgt etgggtgett, tggtteetgg gggeatgagg 720 ggtggagaag gtacatactc ccaaagccat tcctgggccc tgggtgaaaa ggtgggagtg 780 catggateca agagetetgg geceeteaac etececagaa gatageecee agageattgg 840 ggatttggcc tggttcccct cctaacagaa gcctcccttt ttctctttgt tggcagctgg 900 aagacctcag taattctatg tatcctttcc aaggaacccg tctatgtgtg tgtgttcctg 960 agaggtcagt ttcctcccac gcgtccgcgg acgcgtgggt cgac 1004

```
<210> 4963
<211> 1490
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3)...(1493)
<223> similar to gi3702137 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

<400> 4963 aagtetggga agttgaegag cagatagate aetacaagga aagecaagae aaatttetgt 60 ggcaagctgc attcataggc aaggaaacac tgaaggatga aagtggtcaa gaatgtaaaa 120 tatgtagaaa aatcatttat ctcaacacag actttgtttc tgtaaaacaa agactcccta 180 aatattattc atgggaaagg tgttcaaaac atcatttaaa ctttcttggt caaaatagaa 240 gctatgtaag aaagaaagat gatggatgta aggcatattg gaaagtatgc ctccattata 300 atcttcataa agctcaacct gcagagagat tttttgaccc taatcaacga gggaaagccc 360 tccaccaaaa gcaagccctt agaaaaagtc agagaagtca aactggggag aaactctaca 420 aatgtactga atgtggaaaa gtgtttatcc agaaagcaaa cttagttgta catcaaagaa 480

```
ctcacaccgg agagaaacct tatgaatgct gcgaatgtgc aaaagccttc agccagaagt
                                                                      540
caaccetcat agcacaccag agaactcaca caggggagaa gccctatgaa tgcagtgaat
                                                                      600
gtggaaaaac ctttatccag aagtcaactc tgattaaaca tcaacgaact catacaggag
                                                                      660
agaaaccatt tgtatgtgac aaatgtccaa aagcctttaa gagttcatat catcttatta
                                                                      720
gacatgaaaa aacacacatt agacaagcat tttataaagg tattaaatgt actacgtcca
                                                                      780
gccttátata tcaaagaatt cacacaagtg agaaacctca gtgcagtgaa catgggaaag
                                                                      840
cctctgatga gaagcccagt cccactaaac attggagaac tcatacaaaa gagaacattt
                                                                      900
atgagtgtag taaatgtggg aaaagcttca gaggaaagtc acacctctct gttcatcaga
                                                                      960
gaattcatac aggagagaaa ccctatgaat gtagtatatg tgggaagact ttcagtggaa
                                                                     1020
agtcacacct ctctgtccat catagaactc atacaggaga gaaaccttat gaatgcagaa
                                                                     1080
gatgtgggaa agcctttggg gagaagtcaa cccttattgt acatcagaga atgcatacag
                                                                     1140
gagagaaacc ctataaatgc aacgaatgtg ggaaagcctt tagtgagaag tcaccactga
                                                                     1200
ttaaacatca gagaattcat acaggagaga gaccctatga atgcactgac tgtaaaaaaag
                                                                     1260
cetteagtag gaagteaact eteateaaac ateagagaat teatacagga gaaaaacett
                                                                     1320
acaaatgtag tgaatgtggg aaggcettea gtgtgaaate aacteteatt gtgcateaca
                                                                     1380
gaactcatac aggagagaaa ccttatgaat gcagagactg tgggaaagca ttcagtggga
                                                                     1440
agtcaactct cattaaacat cagagaagtc acacaggaga taaaaaccta
                                                                     1490
```

```
<210> 4964
<211> 956
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)...(927)
<223> similar to gi289412 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4964 aacgccgccc atggctacaa ctggggcctc tggtgcatgt acatcatccc cccgcaggac 60 tggctggacc gcggcgacga gtcagcaccc atcaggaccc cagccatgat cggctgctcc 120 ttegtagtgg acegegagta etteggagae attgggetge tggaceeegg catggaggtg 180 tatggcggcg agaacgtaaa actgggcatg agggtgtggc agtgtggcgg cagcatggag 240 gtgctgccct gctcccgcgt ggcccacatc gagcgcacca ggaagcccta caacaacgac 300 attgactact atgccaageg caacgceetg egegeegeeg aggtgtggat ggatgaette 360 aagtcccacg tgtacatggc ctggaacatc cccatgtcga acccaggggt ggacttcggg 420 gacgtgtctg agaggctggc cctgcgtcag aggctgaagt gtcgcagctt caagtggtac 480 ctggagaacg tgtacccgga gatgagggtc tacaacaaca ccctcacgta cggagaggtg 540 agaaacagca aagccagtgc ctactgtctg gaccagggag cggaggacgg cgaccgggcg 600 atcctctacc cctgccacgg gatgtcctcc cagctggtgc ggtacagcgc tgacggcctg 660 ctgcagctgg ggcctctggg ctccacagcc ttcttgcctg actccaagtg tctggtggat 720 gacggcacgg gccgcatgcc caccctgaag aagtgtgagg atgtggcgcg gccaacacag .780 cggctgtggg acttcaccca gagtggcccc attgtgagcc gggccacggg ccgctgcctg 840 gaggtggaga tgtccaaaga tgccaacttt gggctccggc tggtggtaca gaggtgctcg 900 gggcagaagt ggatgatcag aaactggatc aaacacgcac ggcactgacc ccacct 956

```
<210> 4965
<211> 855
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (858)...(342)
<223> similar to gi5360129 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4965 gggcettete eteagtatag cactecatgg tgetgaggtt etgeageaca eggtegeget 60 ccagctgtgt gtctcggatc ttgttctgca gcagaatcag cttttcctca tactggtgct 120 tgagcgtctg caaccgccgc tggctgttct ccagctcgtc gatcagcttc tgcttgattt 180 egateteaca agreaggreg gecaggreeg cetggaagtt caceteette teeteggggt 240 etgagtetga gtecaccagg etetetteac tgecegagte etcatettea teetegegee 300 ettectecte etcacageca etctegtete getettecte etcetectee geetegttet 360 catccgtctc ctcgctgttc tcctgttgga gttttgccct ctttttgaag gcttccttct 420 eggggetett ceteegetge etgacetect tettetttag eegeteeagg teetgettgg 480 ccctgcggat cacctccgag gcatcctcca tggagctggc agggctgccc ccgaaggccg 540 gggcggctgg agaagcaccc agggagtagg ggctcctagc cgaggcccgt gagaggctgc 600 ggcgcaggga ctcgttcatg gcttcactct ctagaagctt agtccgtagc tcctcgatct 660 cccggatgta gttctggatc agcgcaccaa tggcctcatt gccatcgccg gccttggcta 720 gcagcaggtt ggcctcctgg ctcatgagct gggtgacgcg gttgttgatg gcatcgatgg 780 cetectgeat ggettteace egeageegea gggeeceatt etecttetgt ageatggeat 840 tctctcggaa cagat 855

```
<210> 4966
<211> 1666
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1667)
<223> n = a,t,c or g

<220>
<221> misc_feature
<223> in = a,t,c or g
<220>
<221> misc_feature
<221> misc_feature
<222> (1666) ... (786)
<223> similar to gi806570 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4966
gcggccgcag cacctgattt ccccctcagt ggaatttcca acacactgcc ctgagtgccc 60

```
cagttaggcc tggcaccctt ggctggtggg aggggcaggc cetetgcetg tetgettaca
                                                                      120
gaagcccagg gccagagggt ggtggaagcc gggtagacgg acatgtcttg cccaaagcgc
                                                                      180
atnatgacca gagagccagg cctgcataca gtagttggag gcatggggca gaaagcactc
                                                                      240
                                                                      300
ccctccttcg agcactcacc tcacctccag gggcaaaccc cagcaagaga cgcacccagt
                                                                      360
ggttttccag cccacaggag gccctgccct cattggcccc ctctccctt tctgatttgg
                                                                      420
gcccaactgt cgccgtggag cctgggccaa aggcactttt ggaaacacgg atgccagtgg
aggccacage ageteeggge eccatgggge tactgccact etetetggaa aacaggeegg
                                                                      480
agccccggaa ggagcccct gaaggccact actggcaggg cagtgcccag tggcatctct
                                                                      540
ettetettet gtteetetgg ttggtgeage tgeeaatetg atgeeagaea gaeacecaaa
                                                                      600
ggtgtggaag ggtattgcat ctcttggcaa gttcacagtc tgtccggttc ctgccattcc
                                                                      660
ctcctcctcc tgagagcagc acgttgcata tgaaaaacgt cccatccagg atgcaatgta
                                                                      720
                                                                      780
aacaatgcag aaggaaggtc cagccgcggg gctgagcagg gatgtccagg taggctcctg
cettatacet cegtggeaat gacacattea tteeteteet etgatateaa acacacagae
                                                                      840
tggtacatgg agtccctggg ggagcatatc gctgatatcc gacactctgg cttttcactg
                                                                      900
tgtaaccgca gtggcgcctt ctctcctaag ctcttgtcac tgtggggaaa ctttcctggc
                                                                      960
atggtccccc gccccagggg ccctggggcc agattatagt ccaatgtgtg gttttgctgt
                                                                     1020
ttgccacagt tggacttgtc caggccacag tccacttcca gctccttctt ctggtttgtg
                                                                     1080
ttttttaaget gggeggeagg aateaggttg teettetgga agteegacaa gttgtteatg
                                                                     1140
getteeetge tgeegtegte eggeegtega ageegeaget geegeaeage eactgeeaee
                                                                     1200
atgcccagca gtaccagcag cactgccagc cccacaccca gcgagacggc cacccagggg
                                                                     1260
aagctgggcg gcaagcccac ggggaactcg cagcggctgc ccacaaagcc ataagggcag
                                                                     1320
ttgcacacaa aggtgtctgt ggagaggtcg gtgtagcagg tggccctgtt gaagcaggga
                                                                     1380
ctcgaggcac aggcatcgat ggatgtccgc acctcacagc gtcggccaga gaagccggca
                                                                     1440
gggcaggtgc acatgagccc attctccagg tcatggcaag tgccaccgtg ggcgcaaggg
                                                                     1500
ttacgggcac agtcgctgac gtggagttca cagtaggtgc ccgtgaatcc aggacggcag
                                                                     1560
eggeacatge ggettggace teggtteagg caetgteece egttggeaca ggggttgetg
                                                                     1620
gtgcacctgt ccactttctt ctcgcagttg gagccggtga agttgg
                                                                     1666
```

```
<210> 4967
<211> 6506
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6509)...(246)
<223> similar to gi2224591 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4967
ttttttttt ttcatgctta gtgttttatt tcctcaaagg agccacgcca ttggccttcc
                                                                       60
caaatacete etggtateet tecaatttee accaeteeca accgteagat tecatteage
                                                                      120
ttcctccaac ctcagaccaa ccactttctt ttcacaagct cagaccttcc aaatatttta
                                                                      180
aaaatgaata aatgttaaat accaactttc actattacag aaaggggcag ctagaaaagt
                                                                      240
ttactctgtg cacaagactg cgacaccccg ctcgtagaag ctgcgaggat cctcctttgt
                                                                      300
agcaatttcg aagtccacgg tgaagatgag gtctgcacgg gtgaagttca ggtagacagg
                                                                      360
taaggttacc acactggcct tetteteggt gtttgtetge ttgacccage geagetgegt
                                                                      420
caggggaagg gcggttgaga tggcattgga cagtgacagc ttgttgttgt tgcacgtggc
                                                                      480
cccttgaagt ttcaaacccg tgactccgaa gctgcaagcg tcaagggtgg cgccctgtga
                                                                      540
ggtggtgacg ttgacttcca ggcagagctc ctccagggac cagctgttgg cctgggccac
                                                                      600
```

```
660
atactgcctg gtggcagtga tgtacgcctc aggcacgaac aggccaccca ggcacacgtg
                                                                      720
gatgttcttt agctccttgg cgccaccaga tgcagctgcc agtgagatgt tctgcagctg
                                                                      780
tttgatcctc tcgctgaagt cggacaccca ctggatgacg gtcatgccgg caggcaccgt
                                                                      840
gtaqtgggac cagctccgag gcaagatccc tttcactagc tcgttgatca gcgtgcgcaa
                                                                      900
qtaqttggtc tgcttcttct ttccttcgca cacctggacg acatctgcaa ggtcctggcg
aacgtcctga agcagctttg cgcccatctt cacttctctc tcaaagaacc tgaacaaagg
                                                                      960
atcettgata ttetecaegg tgegettgag gtggeteage gtetggggga tgaggtgeag
                                                                     1020
                                                                     1080
ccagttggac gcggtggtgt gcagtgtccg catccaggca gggcgcccgt cggacgtgga
gtetgteete gtettettet cagtetetge gtaggeeagg tegteeteat ceteeaacat
                                                                     1140
ctgcatcttc agcattttac tgatcatgtc cacaccctgt gtggtaagga ggactctctc
                                                                     1200
                                                                     1260
ggegttgttg ggeaggeeca geeaggaggg egtetgggtg teggggagea aeteeaceea
etgeacaaac teetetegee tgatgeeate tggeatttga atgtetttat gteegtegae
                                                                     1320
                                                                     1380
cttgcatgcc agcttaaact cactgtcgaa actcctggtt gtgaacaggc gctccaggaa
ggtgttgage agacgetggt caaactegtt gtecaegege eegecataaa tggaetggge
                                                                     1440
cattaaggtc tttagtgcag accacgggat cttatccggt gagatgttct gcctgccctt
                                                                     1500
ggeegtgtea teeageeacg tgteeacegt ategeaaget gaeegeaggt cagactetee
                                                                     1560
                                                                     1620
aaattcatac ttctttgacc accccagtgg tgcgtatcgt aagcgttctt ggatgatcgc
atgaaaccag gccagcagga agtacaagcg ggcacgctcg ttgggagact tgcatatccg
                                                                     1680
tgagacggga atgctgctga acgtcctcag catgttggcc ttcacccctg gcggtggctc
                                                                     1740
                                                                     1800
gaacacaaag atgeggeeeg caeggageag atteacagge acettggggt tgatetecat
ggtgaggaag agtcggaagc aggcatgcgg ctgcagggaa tgcaacttct tctccagctg
                                                                     1860
catcagccac cetggggcca gatgcacatt etteagcate acceaectge eegaetttae
                                                                     1920
                                                                     1980
ageggtgttt attgeettat etgettggtt aaageettet geagageega ttgeaattga
                                                                     2040
agtgatetge gtgttetget eggetgeaag gteetegaea tgteeaetgg cateataace
                                                                     2100
aggeacagag cacattaaga caggagtgtt gggetteace tetgtgeeca caatttgggt
caggicgage ggetgeteca igaiggaeat gaaagaetee ecaaggittg tigaaacaaa
                                                                     2160
                                                                     2220
catgtgggcc atggccaaca ggcgatcggg ccggaaagcc tggatcagga gcaggcggtg
gatggcctgg ccaatgggtg ttgcaggtgt ttcttcactc cagaggtagg gcacagtctg
                                                                     2280
ctccggggag ctgctgtcca gccagatgcc aaattgctcg tctgcctgaa cctttgcaat
                                                                     2340
                                                                     2400
caagteetta aacgegggaa ggeageteag ceteaceace geeteegeet geteeacagt
caggeeetgg ateetggggg tggageeage acteaggaea ateteattte eteteaagaa
                                                                     2460
gtgctggaat tctgcatcgt aggtgggctc ccccacggtg cccttcagtt tgattcttgc
                                                                     2520
cagcagcatg gcaaaggtaa tgtggtcctg atgcagcatg cctcgagcca ctcggttaaa
                                                                     2580
cgccacctgg aagaggteet ttgttataat ggacaggege tgtgtgtggt eggtgacace
                                                                     2640
etteaggtte gggttetegt ataggaegtt gtgataaatg teeaggaaaa actggaggga
                                                                     2700
gtactggtac aagaagtgta tctgcttgag ggactccatg gtgaagtaga tgctgctgca
                                                                     2760
ggcggtggag agcgggaggt actgctggga cacggtctcc acctcctgca tgacaatgtc
                                                                     2820
egteteetea aettteetgg tgacetetge ageetetete tteaggttet eeagagtggt
                                                                     2880
tatgategtg tegteateea aaatgegeee ttteaeeteg tteagagett gtagtagaga
                                                                     2940
tttttccage tgacgcaaac ggagetgaaa ttcccettga agtttaagaa gatcagateg
                                                                     3000
tttctcgtcc acatcaggtc tttctgcttt aagtacttca tttagacact ggctttgtaa
                                                                     3060
actgctacgg gtaactgtga agtttacaaa agtaacccgg gaacagagat ctggtgggaa
                                                                     3120
ctcgacagtt ggatcccggg tggacaggaa gatgacaaac gatggcgaca ggtctatgtc
                                                                     3180
ctggtccccg agagtgatca gcactctccc ccctgttcgc cgcacttcac ggttcagcac
                                                                     3240
cgggttcaaa actggategt agetttecae atcetggace agaagggggt tacegaatet
                                                                     3300
cagtgcactc tctaagttct ttctgaaggc gtcatccagg aagctggtcc gtgtgatctt
                                                                     3360
acgatectta tatteattea taatgaatte tgtggeetgt eeagaggggt eaatgateag
                                                                     3420
eggataceta ttgaategtt teageatgat ggeattttet gtgeaaaggt cateageagg
                                                                     3480
caaggagetg geetgeeage gaagaegete ateageattg gaaaggtatt cegteetgge
                                                                     3540
aatatetgta eggaactgga tgttggettg etgtaggtga tgggaecagg tagtgaacaa
                                                                     3600
gttctgacgc atctgctggt caaagtaacc cgcgtaggca atgaacgcag ctgacaagag
                                                                     3660
acagtoccca gcaatggtgg acatotggtt tttgaaagtt tcacttgttt tttcccatog
                                                                     3720
ttcacgttca gcagacaagc tettcagaag agcagtgete eggtttaett ttgeetegae
                                                                     3780
agetgecagg tetgeettga tggeetggge etetgagate aggaeggegt 'attecteett
                                                                     3840
gtagegggcg atgetggett ceaggteteg gateatetge tecacetegt tggeettetg
                                                                     3900
etggttgtee ttggegteat ettecagett etgeagetea ttgegtaggg getecaetet
                                                                     3960
etttaacatg tetgeatagt taagetgtge aattgeecat tteaceatag ggeegeaage
                                                                     4020
```

```
cagggaagec egatteacaa ttteataatt gtaaettgga ttggaeatgt aatttttett
                                                                     4080
catcttctcc cttatggcgt cactgatctc ctctgcagag aagttgacga tggtggggat
                                                                     4140
                                                                     4200
gaagttetee egeatgatga tggageggat etgetteeag tetgtggtge ttteeceeag
cagcaggcag atggactcca gcgccagctt cacagcagca ggagggttgg ccatggacct
                                                                     4260
                                                                     4320
cacctccacc aggtgctgct tcttgatcga cttcacagca ttctgggcct caatgacggc
aggttccacc ttatcaagat cttctttgac actcatctgt ttgtctgcaa ttacctcctg
                                                                     4380
etgettatge agetgtteet ggatttettg geteataace ttettettt cageeteetg
                                                                     4440
etggtettte accatetttt teagettgte attggetget geattettea eetecagete
                                                                     4500
ttggctcttt atcctcaagt cacgacgcag ttcttctacc tggtcgactg tctctttgat
                                                                     4560
ettectgage eccaegitea agitgeatetg etgeteetee agetegetee gettetegtg
                                                                     4620
gaacaggttg gcatagtgat tgatgaagtc caggtagtgg cgaggggtga tggccatcgt
                                                                     4680
tetgeegeet egetttgeta geegageatt egeetggtga agagtetgat gaacaaacae
                                                                     4740
acagetgtte acaatggett eeegatggga tggtggetge ggeagettat catacacaae
                                                                     4800
tggcatgtaa tcaggcacga tgtaatttgg cttctccaga tccatcttac ttgtgaattc
                                                                     4860
tttgccaacc tgatacagtg cttcggtgga ccagtctcca aaccaattca acacacct
                                                                     4920
gttgaaaagt gctggtgatg tagctgcccg gtccttgagt ccctccgagg acgggttcat
                                                                     4980
ggtgaacacg acgtggaggt tgcggataac ctggctagtg aaccacttgt agagctcctc
                                                                     5040
gtgcgagtcc agcatcaggc cttccttctg tgccccctct ttgcactgcg tcatcaaggt
                                                                     5100
ggcatactcg tetectteaa agagaceagg caceteteca ttggccagaa gggtatteat
                                                                     5160
tegetecagg aatecagaat etaacacatt agatteatee attataaatg etatetttte
                                                                     5220
attittacag ccagaacgic tcaacactgi ccgtagaict tcatcaaagi citcccctgi
                                                                     5280
gtacttccta tggaccttaa tctggtacac actcaaaccg ttcatccagg cgacgaaacg
                                                                     5340
agacagggta gtttttcctg ctccactaac accaatcaga agcaagtggc cttgaggttg
                                                                     5400
acggaatatt ctgtcaatcc tcagcacgtg gtctaggact tcattaaaca gcaccagcgg
                                                                     5460
aacatcaagt tottottoat aaaagacott cagootagot ttgacataat otottaacto
                                                                     5520
ttettggtet actgggatgt aateetttga cagecagttg etgtacaaga tgggtegget
                                                                     5580
cattgeette tetetgtega tgttagggaa gtgetteaga geaacegtgt egatgttete
                                                                     5640
atcagtecaa egecteteet catectetae gagtetatet tggaagagae geagagette
                                                                     5700
atgtgcccaa atccgaatga ggccttcaac aggcagggtc tccagaggtc tcagcgcttc
                                                                     5760
aaagatgcct ctcacccacc tagtcatttc acggggtgaa tagatatagt gaggttgtgt
                                                                     5820
atcctgggtg aatctctcct gagacatggt gtagaactcc accatggcag cagtgagegg
                                                                     5880
ctctgcatac gtccgcaggg atggaatgag cctcagcatg gcgcggttga aggtgccgta
                                                                     5940
gatctgtgtg agggaggcgg ggcccgggta atccacatac acgacaggca cgtggcgcag
                                                                     6000
gaacctgtgt gagaggggct ttcttccagg gtctgtgggg ggattacaag ccccaacaaa,
                                                                     6060
etggattete tecagettea eccatgitig atetgaggia eggiaaaage etcegigete
                                                                     6120
caccatctgt ctgatgaagg atatgaccct ctgggtccca tatttatcca tatctggcaa
                                                                     6180
gttgatttca tcacagaaca acaccagcca ctttccaagt tgaacaggag ccaaaaccac
                                                                     6240
eccattaggt gtgegeetgt actegeagta gtgateaaaa gtetteagaa geagetetgg
                                                                     6300
agtagtagca ctggagaagt tgagacccac cacctccatg tcaggcaagg cccggagggc
                                                                     6360
gctgaagagt gtcatggtct tgccagaccc aggagggcca cacaagacca ggggcttgtg
                                                                     6420
tteggeeage caagtgtaca agagggette gtggeggaet gtgteeageg ttggeaegae
                                                                     6480
gacatcaggg gctgccacct tgtgcg
                                                                     6506
```

```
<210> 4968
<211> 7061
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (7062)...(1105)
<223> similar to gi3327054 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4968 60 ttttttttt ttgtccgtaa ggcttttatt ataaagaaga ttccagagtc ccagctgccc ccctccagec cccatggget ctgagccagt cccaacactg gctgagttgg ctgcgagggg 120 cccgcatggc ccatcggcca cagagggtcg tttctggcag gaacggagtg ggtggtagtc 180 teaggegeea ggggegetet gecaggtetg eccgetetet ggaacagtea tttecagtgt 240 .300 tgcatgggga gcctctcggg acccctcccc gggtcctttg cgcaagcggc agctattcac 360 agttggtgca tgatacgttt tttaatatat aaaagcttta aaaaaaaaag tggtgctatc 420 tttagaaaca ettteageaa gateaagtag eecagetaca geeteggtge atettaacee ctctcctttt cctggagacg gggctcccag ctcctgtgcc ccccatccct cccctccacc 480 ctccctgctc ctggagaagc ccacagagca ccccatggcg cgggcactgc ccactctacc 540 aacageegee caageaacaa aaatetgaca etaettgaaa etgtetgtgg eeaggateet 600 ctacgggtga gggggaagtg gagataacat tttggtagtt gaagcagaaa ccaatcaaag 660 gtcagttcaa ggagggctcc ctgcaccagt gtggatgagg tagagtttct gggctgcagc 720 ctoogggotg goggottoot otooccoagt ttgtgottgg cogcotggat goacggggot 780 cttggcagca ggaccaactg gacgttgtgg agcaagtggg tgggcacagt gcaggccgtg 840 ctgggcagat gggggagcct gaccagctct ctggcctcca tcccagagac tgatctgggg 900 acaggtggga ggggatggag gtgcccaggg gtcaaggcgg gggcgcccct gtctcagaga 960 geageeete etectgeece egeeecagee gtetetgete agtattteee agtetgagte 1020 acaggcacgg ggtagaagat caagttgagg cccagtgggc gtccatttct cccagcagca 1080 gcctgaccaa ctctccatgt gtctcaggcc tcactgtagc actcgtagat gttgtcctcc 1140 atcaaagcca ccacctgctc aaacttgtgc tgcagttgtg tcctccgggc cgtggggttg 1200 geotecageg eggecatgat etgeggeega tacetettgg egtaettata aatetetgee 1260 atggccacat tggtgttgaa ctcattctgg tatttcctcg actcctcggc cagatgggca 1320 ttcatctctt gctcgctgag cggcgtcatg tcctggatct gcttgtagta gcgctgcacg 1380 atcttccggt actcaggaat ctccttggcg tagaggagct tgttggttgg cgaatccttg 1440 cccagctgca ggtcagagat ggagcaggcg tcgatgaagg cctgcgcgat gactgaaagg 1500 caggogtega tgtggtetgt ettgtegatg teaaagacaa aetgggggtt etteaggatg 1560 ttcacccaga accggagagg aaggctgttg gtcttccaga tgtgtagggt gtcggggtcg 1620 . gagatteece tetteteage etgeteetee aggaagtega aaaagtaett gaeageeagt 1680 gggggettgt etteaeggat acteagaatg geettgaaca ggteateeag aaacttetge 1740 aacgtgccct tggtggagag caggcgggtc aggtagattt ccgggagcac cttcttgcga 1800 tggctctgcc ggtgagactt cttgggctcc gccagctcgt ccgtaggcag caccaaatgg 1860 aaatacttet etgtgteeaa gtettteaet eggeeeagtg tgttgteett ettgtetatg 1920 agactcatgg ccagggaggc accttcaggg atcttgtaat gggccagcgt gttaagcttc 1980 ttgcggccgt cttccaccac tgaggtgtcg tccaggtccc gaaggatgta gctctgtgtg 2040 ctggaggcga accactcaag gtcgacgtcc tctgcacgcg gccactggga gtagggcaca 2100 ttettgeaga aggeeteeag gatettetee ttgaeetgtg teagegtgte ggtgteeatg 2160 gcccgcacgc tcagcgagtc catgccacag ccctggaagg acacgttcag gttccggggc 2220 ttggcctcga tgttctcccg cagcagccac tcctcattga gtgtgtagcg ggccttgcct 2280 gtgatggcgt cgatggagcc cttgttgatt tgctgcttga tggcacacag cagcaggaag 2340 aatggctccc ccaccgtctc ccgcagacag ctgtacatgc agatggacat ccagttggtg 2400 agcatettet ecaccacaga etetgtgege: egcagcatga gettggggtt ettggeggee 2460 gaggcatcaa tgaggtccac cagcagctcc ttcatgatgc tggtgtagta ctccagcttg 2520 ccgtgcagcg cgatggtcag cagcgaggcc aggctgcacc tgtcgcgcac cgcaaagtcc 2580 ttctgctgct ccagcgcgtg gacaaagacg atgaggaagt gcttgttgtc gagtagtgag 2640 gagaacaagc taattccctc ttccatgttg ggccggcagc tctcaggaat cttccactct 2700 cccagcagtg ggtgggtttc ctgtgcctgg gagctgccct gggagttgag ggtctgggag 2760 ggcagcacgt aacgctcttc ataaagggag gaacacttgg ggaagaaggt gcgggtcacg 2820 aagtgettat aetecaggaa ggggatgeed tggetgeggt teageteett ggtgagatet 2880 gtcatgtctg tctgcagctc agcgaagcct ttgcggattt cctctcggat ctgagattcc 2940 atetecteca tetgeageag egtettetge cagtaaeget cageaegteg getettggta 3000 cagaagacga acagggccac cacggagagc agcagcagga cgctgcagat gacgatggac 3060 acgatgatgg ccgtctcgct gccccccagc tgcagtgtgg cgatggtctg gttgaagttc

3120

```
cctacctqqa ttgtqatqqg cagetgeecc acggeegeqe ccagggaete gttgaccgag
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                                                                     3240
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                                                                     3360
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teagecaeag ceacetegte tgegtaggee egeceattga tgaagaagte caetggeget
                                                                     3480
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                                                                     3540
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aaacgotcac cagocactgt gatggtootg cogocactga cagggotgog goggggactg
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cgacgetega agegeacaca cacaggeace ggageeggea gggeeceete aggeatggtg
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caggogatge tggtatetgt gegeateage teegtgeagg ggtetgtgte gtteaeeagg
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tecegggaet tgeeeteett agaggegtte aeggteaeca caeetgagag tggteetggg
                                                                     4020
                                                                     4080
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caggecacae caccaateca caegeegtgg gecaegteae tgageegeeg geceaggtte
                                                                     4140
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ccatcactcc acatacacag gtgacccagg tettegegge ccaggeactg ggaacagteg
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tectecagee caaaactaca etecaggget geaccetgga aaaaggeagt gttggeeaga
ggcaccagga tgttctggga gccacccgta ggcacgggtg ccaggggtga gagcagggtc.
                                                                     4620
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acacaggagt gctgctggct gcaccagaaa cagggccact gtgccgacag gcagctggta
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caggetgtgt gggggtacac ttgtgcagtg cggctgcagt cgtagatggt gaaattggcc
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agegggtget geaggtgage ageteeacag tecagetget etggetggag etggatgttg
                                                                     5580
agettgeget egeaggeegg teeegtgeee tgeaceaege tgtegageae egeeaeeaeg
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tegggegeeg gttecacgaa geaggeggtg egegeagete ggatggegge tegeaegteg
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                                                                     5820
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                                                                     5880
agettettgg egtegeegee ggegeegtgg ggeaggeaga tgegegeeag eaggeteege
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gcctggctct ccttgtcgcc cgcgcgcgcc tcgctgttga gcgccaggta cgcgtaggac
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tgtgcacccg gcggcgggtc ggacgggtgc aggaaggcgc tcacgaaqcc cagcttqtqc
                                                                     6060
tgctccttgg cgccctgctt gatcttgagg atgttgtcgt cggaggggtt gaggtcgaag
                                                                     6120
gtgaagaget tggecaggte geegegegtg tecagggage ggatggegat etegggegtg
                                                                     6180
ttetegaage ggtggteete caggetgegg ttgegeggga agaaggaget geegtaaceg
                                                                     6240
gtgtacgtgg cgcccacgag caggcggctg cccccgcgc ccgcggcggg aggcagaact
                                                                     6300
agccccacgg tggacgcgtt cgggtggttg gccgccacgt tcagcatgct ggggaacacc
                                                                     6360
gtgacgggct cggcgggcgg cgcggcgggc gggaagcgca cggccacggc cgagatgtta
                                                                     6420
ecceggegee geagetggea gaageeetgg tagatggace egeacacgae taccaggeee
                                                                     6480
tggccggggt ccagctgcag gatcttgttg tagttgtccg tgaggcgccg cgggtgctcg
                                                                     6540
```

```
6600
cacgaggect geggeagetg eggagegtga cacageggge tgtegggeac egggeecaeg
geogetegg cetecagget caggttggeg ceegacaget gatagaggeg gttgaeggee
                                                                    6660
gccaggtaca cggtccccgc cgcgccgtcc agggcgaagt tgttggtggg cgtgggcgag
                                                                    6720
                                                                    6780
gggaaccgac gctggatete cagggegeeg geeegegeeg ceeceaggag cageageaac
agcagcggca ccgggcaccg cggcggcgtc tggaacggcg gggggctggc ggcggcgcc
                                                                    6840
                                                                    6900
cgggcgctaa ggggtgcgcc gcccgcggcg cgaggagcca tccgggcgtg cgcgggctgc
                                                                    6960
geggegegge gagtgeatgg ggegaggege ggeegggage egggageeeg gaggeggegg
qaqqeqqqq qeqqqeeegg gteegegagg egetteetge eegegeeage egeeeegge
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cccggcgccc gggcccggct cagcctcgcc gcgcagcccg g
                                                                    7061
```

```
<210> 4969
<211> 1173
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1174)...(952)

<223> similar to gi3002527 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

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ccaaccaage egggtactet gagtetggat eegacettge tagaaataeg gtetgaggea
                                                               240
gcagaggttc tatgagagtc cacagaaggt cagcacaggc taaggtaaaa gcagggcaat
                                                               300
360
aaaatgagaa ttggcaaaaa ggtatcatta ggctcatacc taccacaact ctacagccct
                                                               420
accacttacc agaatggata gattcctagt cgtgtaacca taaaaacagc actgaagatc
                                                               480
acaaaaaggg tgtcacagag ccgctgatac ttggcataat tggccagttt ggctgcctgg
                                                               540
                                                               600
agaaaggaag aaagaattga gctggggaga aagtcattcc tctcatagga agaaaagaag
agaagaagaa gatggagaaa gagagattgg gtttttacct ccagcaagaa gtctgagaca
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                                                               720
tcatgtagac acatgatcag agttcccact cgaatcatat tgttgatgta ggagaaggag
                                                               780
ataageecaa tggtgaecaa gtgatgeaca aacatgatea ggaagteeta ggaaggaatg
gaaatagaag agggaggtaa aagctgggcc ctagaaacac cagccaaccc aacgtcctgc
                                                               840
attattetet gagaatetta ecceacecea tatagaatag tttecattgg eegggegagg
                                                               900
tggctcatgc ctgtaatccc agcactttgg gagggcaagg tggtcggatc acctgaggtc
                                                               960
aggagttcga gaccagcctg gccaacatgg ggaagccccg tctctactaa aaatacaaaa
                                                              1020
ataageeggg ettggtggea tgtgeetgta ateeeageta etegggagge tgaggeagga
                                                              1080
gaattgetea aacetgggag gtagaggttg cagtgagetg agategegee actgeactee
                                                              1140
agcctgggcg acagactgag attccgtctc aaa
                                                              1173
```

```
<210> 4970
<211> 4413
<212> DNA
```

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1)...(4012)
```

<223> similar to gi6014482 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

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```
gtttgccatt cccggtggga tgacttctcc tgttcctgtc ctgccctcac aagtgggaaa
                                                                     2820
gcctgtgagg agggtcaaag gtgtggattc agcccgtgtc ctcacggagc ccattgccag
ccqqtqcttc aaggatttga atgtattgca aatgctgttt ttaatggaca aagcggtcaa
                                                                     2880
atattattca gaagcaatgg gaatattacc agagaactca ccaatatcac atttggtttc
                                                                     2940
                                                                     3000
agaacaaggg atgcaaatgt aataatattg catgcagaaa aagagcctga atttcttaat
attagcattc aagattccag attattcttt caattgcaaa gtggcaacag cttttatatg
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ctaagtctga caagtttgca gtcagtgaat gatggcacat ggcacgaagt gaccetttcc
                                                                     3120
atgacágace caetgtécea gacetecagg tggcaaatgg aagtggacaa egaaacacet
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tttgtgacca gcacaattgc tactggaagc ctcaactttt tgaaggataa tacagatatt
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tatgtgggag acagagctat tgacaatata aagggcctgc aagggtgtct aagtacaata
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                                                                     3360
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caggaagagc aattteteaa aatetetace aatteagtgg teactggetg tttgcagtta
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aatgtctgca actccaaccc ctgtttgcat ggaggaaact gtgaagacat ctatagctct
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tgcttttcaa acccctgtat ccatggcaac tgctctgaca gagttgcagc ctaccactgc
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                                                                     3840
ttaaaatgta tgtgccggcc aggttttact ggagaatggt gtgaaaagga cattgatgag
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ctggccattg ttgcttctgt tgtcacctcc aacaaaggg caactcaggg aacctacagc
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cccagccgtc aggagaagga gggctcccga gtggaaatgt ggaacttgat gccacccct
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gcaatggaga gactgattta ggagcattgt gtcccttcga gatggggatc cacacactgt
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gaatgtgatg actgtacttc aggtatetet gacatacetg acaatgttaa tetgcaactg
                                                                     4320
ggattacact ggaactacag gaatgattee tttgaccace ttaaaaactt tcaeagtggt
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tccgctcgac accattgttt tattatatta tat
                                                                     4413
```

```
<210> 4971
<211> 1489
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (354)...(1087)
<223> similar to gi861392 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 4971
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agcaggcaag ctccttggcc cctccacact ggtgcctgtg aaggtcctag gctctactgt
                                                                      120
teetttgtet catttacece catggeeetg gtgeteagea caatecatgt ceagecetta
                                                                      180
ttaggtgttt caggaagtgt ttggatgcag agggtctgca cagggagtca agcctgggga
                                                                      240
gagggaggaa ggtgagggtg gcacggtcag ggctggggag cccgatggtc ggggtcttac
                                                                      300
teccagggat gteetgagea gtgacggget tgtteetaca ggegetgate cegetggeee
                                                                      360
tggaaggcac ggacgtgggg cagacaaagg cagcccaggc cettgccaag etcaccatca
                                                                      420
cctccaaccc ggagatgacc ttccctggcg agcggatcta tgaggtggtc cggccctcg
                                                                      480
```

```
tetecetgtt geaceteaac tgeteaggee tgeagaaett egaggegete atggeeetaa
                                                                      540
caaacctggc tgggatcagc gagaggctcc ggcagaagat cctgaaggag aaggctgtgc
                                                                      600
ccatgataga aggetacatg tttgaggage atgagatgat ccgccggqca gccacggagt
                                                                      660
gcatgtgtaa cttggccatg agcaaggagg tgcaggacct cttcgaagcc cagggcaatg
                                                                      720
accgactgaa gctgctggtg ctgtacagtg gagaggatga tgagctgcta cagcgggcag
                                                                      780
etgeeggggg ettggeeatg ettaceteea tgeggeeeac getetgeage egeatteeee
                                                                      840
aagtgaccac acactggctg gagatectge aggecetget tetgagetee aaccaggage
                                                                      900
tgcagcaccg gggtgctgtg gtggtgctga acatggtgga ggcctcgagg gagattgcca
                                                                      960
gcaccetgat ggagagtgag atgatggaga tettgteagt getagetaag ggtgaccacá
                                                                     1020
gccctgtcac aagggctgct gcagcctgcc tggacaaagc agtggaatat gggcttatcc
                                                                     1080
aacccaacca agatggagag tgagggggtt gtccctgggc ccaaggctca tgcacacgct,
                                                                     1140
acetattgtg gcacggagag taaggacgga agcagetttg gctggtggtg gctggcatge
                                                                     1200
ccaatactot tgcccatcot cgcttgctgc cctaggatgt cctctgttct gagtcagegg
                                                                     1260
ccacgttcag tcacacagec etgettggec ageactgect geagecteac tcagagggge
                                                                     1320
cetttttetg tactactgta gteagetggg aatggggaag gtgcatecea acacageetg
                                                                    1380
tggatcctgg ggcatctgga agggcgcaca catcagcagc ctcaccagct gtgagcctgc
                                                                     1440
tatcaggcct gccctccaa taaaagtgtg tagaactcca aaaaaaaaa
                                                                     1489
```

```
<210> 4972
<211> 887
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (227)...(373)
<223> similar to gi5726241 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4972
cacaatttca geteactgca geeteegeet eccaggtteg ggtgatttte etgeeteagt
                                                                       60
ctccagagtg gctgggattg cgggcgcccg ccaccacgcc cggctggttt ttggtatggt
                                                                      120
tagtggggac ggggtttcgc catgttgacc aggctggtct tgaactactg acctcgggcg
                                                                      180
atcogcotga otcagoctco catagtgoog goattacagg ogtgagocac ogcotggoat
                                                                      240
ggtgcagaag ctggatacct accaggagta caaggaggct gcgtcctctt accaggaagc
                                                                      300
ctggagcaca ctccggaagc aggtgtttgg atcctggatc agaaacccac cggattatca
                                                                      360
ccagttcaag tgagaaggaa atgtttgctc tggtagcagg accettcatc ctgaactgcc
                                                                      420
ttcctccacg caggacaagt cttagctttt ttggtagtta aatcagggaa cattctttct
                                                                      480
gagetttgca tetetgttgt gtaatacaga tggaatetgg aaettagage aagetataet
                                                                      540
tgattgaagt agctctctgc taaaatggca tctcactaat gacctcacta tctgacttcc
                                                                     . 600
attgtgtttt attgcttctc taaaatatga aatcagagtt tggaacatga tgctttgaaa
                                                                      660
gtactctgca gcagctctgt tttatgggtt cctacattga ttcagcaaat atttattgag
                                                                      720
ctgaaatgat gtttgacgct ctgcaagttt tacagctttg cctagcatag cgaacatata
                                                                      780
ttttgtattc ccagcctttc tttcttcagg gagccattct tttcccattc ttcagtgatc
                                                                      840
ctgctctgtg cctcagactt ggctgaaggt aaccttactc cctggct
                                                                      887
```

```
<210> 4973
<211> 2550
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(2156)
<223> similar to gi473522 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<400> 4973 gatggcgcgg gagctatacc acgaagagtt cgcccgggcg ggcaagcagg cggggctgca 60 ggtctggagg attgagaagc tggagctggt gcccgtgccc cagagcgctc acggcgactt 120 ctacgtcggg gatgcctacc tggtgctgca cacggccaag acgagccgag gcttcaccta 180 ccacctgcac ttctggctcg gtaaggagtg ttcccaggat gaaagcacag ctgctgccat 240 cttcactgtt cagatggatg actatttggg tggcaagcca gtgcagaata gagaacttca 300 aggatatgag totaatgact ttgttagcta tttcaaaggc ggtctgaaat acaaggctgg 360 aggogtggca totggattaa atcatgttot tacgaacgac otgacagcca agaggotoot 420 acatgtgaag ggtcgtagag tggtgagagc cacagaagtt ccccttagct gggacagttt 480 caacaagggt gactgcttca tcattgacct tggcaccgaa atttatcagt ggtgtggttc 540 ctcgtgcaac aaatatgaac gtctgaaggc aaaccaggta gctactggca ttcggtacaa 600 tgaaaggaaa ggaaggtctg aactaattgt cgtggaagaa ggaagtgaac cctcagaact 660 tataaaggta ttgggggaaa agccagagct tccagatgga ggtgatgatg atgacattat 720 agcagacata agtaacagga aaatggctaa actatacatg gtttcagatg caagtggctc 780 catgagagtg actgtggtgg cagaagaaaa ccccttctca atggcaatgc tgctgtctga 840 agaatgettt attttggace aeggggetge caaacaaatt tteqtatqqa aaqqtaaaqa 900 tgctaatccc caagagagga aggctgcaat gaagacagct gaagaatttc tacagcaaat 960 gaattattcc aagaataccc agattcaagt tettecagaa ggaggtgaaa caccaatett 1020 caaacagttt tttaaggact ggagagataa agatcagagt gatggcttcg ggaaagttta 1080 tgtcacagag aaagtggctc aaataaaaca aattcccttt gatgcctcaa aattacacag 1140 ttctccgcag atggcagccc agcacaatat ggtggatgat ggttctggca aagtggagat 1200 ttggcgtgta gaaaacaatg gtaggatcca agttgaccaa aactcatatg gtgaattcta 1260 tggtggtgac tgctacatca tactctacac ctatcccaga ggacagatta tctacacgtg 1320 gcaaggagca aatgccacac gagatgagct gacaacatct gcgttcctga ctgttcagtt 1380 ggatcggtcc cttggaggac aggctgtgca gatccgagtc tcccaaggca aagagcctgt 1440 tcacctactg agtttgttca aagacaaacc gctcattatt tacaagaatg gaacatcaaa 1500 gaaaggaggt caggcacctg ctccccctac acgcctcttt caagtccgga gaaacctggc 1560 atctatcacc agaattgtgg aggttgatgt tgatgcaaat tcactgaatt ctaacgatgt 1620 ttttgtcctg aaactgccac aaaatagtgg ctacatctgg gtaggaaaag gtgctagcca 1680 ggaggaggag aaaggagcag agtatgtagc aagtgtccta aagtgcaaaa ccttaaggat 1740 ccaagaaggc gaggagccag aggagttctg ggaattccct tgggagggaa aaaaagactt 1800 acccagacct tcaccactác tggaaaccca ggctgaagac catccacctc ggctttacgg 1860 ctgctctaac aaaactggaa gatttgttat tgaagagatt ccaggagagt tcacccagga 1920 tgatttaget gaagatgatg teatgttaet agatgettgg gaacagatat ttatttggat 1980 . tggcaaagat gctaatgaag ttgagaaaaa agaatctctg aagtctgcca aaatgtacct 2040 tgagacagac cettetggaa gagacaagag gacaccaatt gteateataa aacagggeca 2100 tgagccaccc acattcacag gctggttcct gggctgggat tccagcaagt ggtaaattgg 2160 tatttgtaaa aagcaaacaa acattacaag gcagttatct cattgctgtt ttgggagagg 2220 aacgggaaaa gctttttgct tatttgtctt ttgaaaatta aggctgggcg cggtggctca 2280 cacctgtaat cccagcactt tgagaggatg aggtaggcgg atcactgggg tcaggatttc 2340 gagaccagcc tggccaacat ggcgaaacct cgcctctact aaaaatacaa aaaaattagc 2400 tgcgcgtggt ggtgcacgcc tgtagtccct gctacttgga aggctgagac aggaaaattg 2460 cttgaaccca ggaggctgag gttgcagtga gccaggattg cgccaccaca ctccagcctg 2520

```
<210> 4974
<211> 1100
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(238)
<223> similar to gi5834580 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4974
actggaaagg aaacttttct accctgagtg cgagataaga acgatgggtg gaagagagca
                                                                       60
acgccagage ccaggegece agaggaettt ettecagett etgetgteet tetttgtgga
                                                                      120
gagcaagete cacgaccacg étgettaett agtagacaac etgtgggaet gtgcagggae
                                                                      180
tcagctgaag gactgggagg gtctgacaag cctgctgctg gagaaggacc agagcacgtg
                                                                      240
ccacatggag ccagggccag ggaccttcca cctcctaggg tgaaaccagg agggattgct
                                                                      300
tgcttcactt gtacaaggca ggaacggtgg catcgggtgg gggaaacttg gagttggaag
                                                                      360
gtggctaatc tttgattcta tgtttttgat cctcctggca ctccagacct gggtgatgtg
                                                                      420
caggagagca cactgataga aatcettgtg tecagtgeec ageaacteet geetcageet
                                                                      480
cccgagcagc tgggactaca ggcgcccgcc accacgcctg gctaactttt ttgtattttt
                                                                      540
ggtagagacg ggttttcacc gtgttggcca ggatggtctt gatctcttga ccttgtgatc
                                                                      600
cacctgcctc atcatcccaa agtgctggga ttacaggcgt gagccactgc gcccagcatg
                                                                      660
ttagacaatt tttaattcat cctctctgtg ctgttgtttt ctcagctgtg aaaggaatat
                                                                      720
tetggtgggg acaaggttae agagttgetg agagggtete atgacatgaa ggtactggee
                                                                      780
ttggcacagt gcctgggggg gcggggactc cgcacatgcc tgtgatgtca cagttactgt
                                                                      840
cagttcacag cgaacettcc etecttttcc tgttgacttt cccacactcc tgtaaccetc
                                                                      900
cetecetece ttetteetet etetetete caeteaegea caegeacaca caeacacaca
                                                                      960
dacacacted atteactgte tecatgacte tggagtaaac taacgteteg agttgecatt
                                                                     1020
ggaageeeca ttgteeteat ttagaettte atgggttata ggeaettttg aetteetggg
                                                                     1080
gtccttcttc agataaaaag
                                                                     1100
```

```
<210> 4975
<211> 885
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(886)
<223> n = a,t,c or g
<220>
<221> misc_feature
```

<222> (850)...(652) <223> similar to gi3659694 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 4975
tttttttttt ttgagatgga ttgaagcgac tgcctttatt gcatagacct tttcaattgc
                                                                       60
tttttagatt ggggacggag gacgcgcatg agacgaacag gggatatgaa tttccccgcc
                                                                      120
cccaccegeg ggtagaggaa cattaggtgc aaatectage geeggeeeeg gggaacetge
                                                                      180
ccctcctggg ctgattggcc agctaaatgg aggcaccgga gtggatgggg cgaggctgcg
                                                                      240
ggccctgacc ggccgactca ctgaggccta ccccagccag tacattccag gtcctgtcat
                                                                      300
tgggcgacgc gtaaaataga ctccgccctc agccatcctg gccgggtagg agcaggtggc
                                                                      360
aagcgtcagg actgagccct gccccgtaag ggcggcccca gatcagacgc caggccccgc
                                                                      420
ceteattgat caggeactae eetegggaeg ageceattte tetttaaceg tgacgaegee
                                                                      480
caccttccag catcacgtct ggtcccatga aagcgagcgc aatcctgaga cggggccagg
                                                                      540
gcccctgcca ccacaactct agcagccagg ccacaccccc taqctcaqqc tccqccccat
                                                                      600
tggaatgtag gccccgccc cggcgggtac caagettgtt tagtttcagg gctcccgccc
                                                                      660
cgggcagcca ggaggcccag tgagcagtgt accgatgcca gggtgcatct gtgcctgtag
                                                                      720
eggeccatae tecacetget eccegtecae tgtgageaeg eegegtggtg tgageggete
                                                                      780
taggoggaag geacggaceg eggegtagee eagetgegga eageceagge tgaagtgget
                                                                      840
accacgetee gaatteence geactggact agggatgnte aacat
                                                                      885
```

```
<210> 4976
<211> 2467
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2463)...(1784)

<223> similar to gi5304869 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4976
ttttttttt ttaccactta gattaagtta tgaaatttat ttatagtttt accttatata
                                                                       60
aaagccatgt atatatcaaa tctcactttc ttggtaaagt catcttatta gaaatacaag
                                                                      120
aagtgcactt aatacaagga agtaagtttc teggtgccac caggtgaggt ggtacataca
                                                                      180
ctcacatcag tecetcaaac gaaggittic ggeagattic eeettecaga ettetgagat
                                                                      240
gatetgaatt eaggaaggte tgagtgaaet tetteeagaa attacagtga aacaagetga
                                                                      300
cettaaettt tgggteetee egagaaatae taatgaaaaa aetatttttt teeagtggge
                                                                      360
cctgtgtttg ctggcttctc ggcatctgca gctcttcacc ggcaggcgcg gagcccaca
                                                                      420
gcagcagtgt acaagcgcga ggtagcactt gcagccccat cagagacata tgacatcaaa.
                                                                      480
aaaccaacct aaacccatat gccttttggt caatcagagg ttctgctcct acagattagg
                                                                      540
ctgacagete ttggacttat atttattaat atttgtgaaa tatgaactee aaggttettg
                                                                      600
agctgttcct aaagcaagtt tccagcaaca gcttttatta acaactgttc atcttgcgat
                                                                     .660
gtgctgtgcc ttatgaacga tgtctcgtca gaacagacca ggggtggtac tgggtttcct
                                                                      720
atagettete tetgeateta caaageaggt ttteaaaeae attttacatg tegaaaceag
                                                                      780
tgtcataagg aaaacatttg tgacagaaaa acaatgctca gtttaatcta agttaccaag
                                                                      840
```

```
cagaaggtaa aagaactagt atccgctgag tccccaaacc tctttcttct aattcatctg
                                                                      900
aggatttttt gtgcttctag aacaagaatg taggcaggct cccaaatgga gaggtaaaca
                                                                      960
tgaccgcgtt gtttgaaact acttcattaa tttgtaaatc agaaccaaaa agctctggcc
                                                                     1020
ctcccacttc tcttagctga ccctcctccc cacttacgga taaacagact ttaacttccc
                                                                     1080
taacccagaa acacttccac caaaaatgta tggttatacc ttatcctaaa aaggcaccat
                                                                     1140
                                                                     1200
gcaggcattt aagactgaac cagtgaactc taagtatgta gtagtagaaa atatcactaa
tcaaaacttc cagcatcaga tggtacaaaa ccccaagagg actggtgaca tgtaccccgg
                                                                     1260
ggatggccaa ccccagcttc ttggcaaccc cacaagccca agcggggagc ttcagctctg
                                                                     1320
gteaggtgea eggetgeeaa agtetgeaca eettgggggae aaggaaagga gacaettget
                                                                     1380
tcattgtgct attcatgacc cagaaaaggt cctggctggc ttgaaggacc cgagagacaa
                                                                     1440
acactggatg ggaggaatga gtgtgaaaca agaggtggag aagctagatt atcttccaca
                                                                     1500
ggaggeggea gaageteeag gaagtageeg agaaceaata egaactegae egtgtgacaa
                                                                     1560
acaaggttaa cagtagggga agacagcttt ggcaagagcc caaagggaag agaagggctg
                                                                     1620
acctggggac ccacttecce tgtcagaagt gaccetgtee caatgecatg getcatttte
                                                                     1680
aggtctgttg aacaggtaag gtacaggagt catagatttc acgtttaata tgtaatggaa
                                                                     1740
getetgtaac atgagacaga tagcaagcac ggactetget caetggtega tgatggageg
                                                                     1800
ctgcaacacc tgattcatca tgtcctcttc atcaacatca taatccacaa aagtgtcata
                                                                     1860
                                                                     1920
agaaaaccgg tgccggcgct ggatgtgctc tctgaagttg gcgctgcggt agttggggtc
                                                                     1980
tececaggge ategaggeae atateggaca aaccacagat ttggtateeg tgctatggaa
taatttgcag tgttccacaa gtccttcctg atcaaagttc ttctcaggac agtaaggaca
                                                                     2040
aggaaaggtg taacggtttg gaacatteet tggetgaaga gatgeateet taatggtgge
                                                                     2100
cttcacacct tccatgatgt aattctggta tttggaacaa gtagccacgt gggaccggat
                                                                     2160
cttggacagg aagaaattct tacggcagcc atggcaagaa gtctctgtgc tctcgatctg
                                                                     2220
cegetegage tecaeggete ggacgecagg tgecagageg etgegacaca ceceacagae
                                                                     2280
aggettette ggetteagae attectgeag geatgeagag caaaagaegt gteegeaggg
                                                                     2340
cacctgtacc ggcttctcgt acacctctaa gcacacggga cacgtgaagc gtcctagggg
                                                                     2400
gteageetee geegeeggee eegeeagetg egeageacee eegeagteee getgttgege
                                                                     2460
                                                                     2467
cacgaaa
```

```
<210> 4977
<211> 1010
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1011)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (19) ... (120)
<223> similar to gi5930071 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4977
cttcttcttt ttaacctcag gttaacccca aagattgtct tttcttggag tgaaatcagg 60
aacatctctt tcaatgacaa aaagtttgtc attaaaccca tcgacaagaa ggcacctgta 120
agttccaaag gattctattc aggggctact actttttcat tcttatactt gtcagggtaa 180
cggacaagtt atactgtgac gagtagccag tgatagtcca aactcctcat gaggttacat 240
```

```
300
tgagggccag agatectgtg ggccaggcaa ttgctgcagg ggagaccact taacttttca
aatgattoto attoottatg aagaaaaggg cagttotgag coattggcca aatgataagc
                                                                      360
atttcccaaa atgctgtgtt tttggtgtgg agagccagcc tgtccccttg accacctggg
                                                                      420
tgcagggact ctccccggca cctgacggac agtgggacct gcgagtctca agggccagat
                                                                      480
ttgcctttca gagctgtcct ggaacttacc caagataggg acagtcagac ttgcacccaa
                                                                      540
                                                                      600
gcattgctgg tgcccaaggt ttcatcgggg cttcacccac ttctgttgtc agaggtgtgc
atcctcacac aggtgacact ggcaggcagt cattttggga ggacatggta agaaggcgac
                                                                      660
                                                                      720
actttatgtc ctgaaatctg atagtattga ttgtaatagc tgcaaagacc agtgcattat
gtaaatttgg ttttatttat tcttctgaca tttaaacttt tgttaactca gaatatttga
                                                                      780
                                                                      840
gacatacgca cataactgta gcattgtaga atgggtaagg attttgttat ctaatcagaa
                                                                      900
atctaqttct ctaaaaaaat tgccacctga aggaaattct gttaccacct taggagcctg
ttctggaatt ttacgaaaat tataggatgg ggaaagggac ttttgtgttc ctccatggtt
                                                                      960
                                                                     1010
antttttgtt nccctaggtt accagtgttt aagccttggg gggagggcca
```

```
<210> 4978
<211> 1001
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (927)...(556)
<223> similar to gi4584796 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4978
                                                                       60
ttttttatca ttgacaatgt ttattatcaa gaaactttag gttttttaaa agaatgctcg
ttttagaata caccaagagg acactctgtg acaggacata tacaaacaag gataattaaa
                                                                      120
atattaaata ctatctaaat taaaagacca taattcaaat tgctaattat aatatttgtg
                                                                      180
teggtagaaa taactatagt teecetteat gaaatteace eccaegttet catgaagact
                                                                      240
                                                                      300
atgacgtote accacattt cagttattta atttacaata atcaatgctg agttttctgt
                                                                      360
gctgaagcat gcactgttac agaaagcaca aaatcctatt tacagggatt tttagttttc
tttaaaatgt atctcaagca tcttttaaag tgcgagctac aaataggttg tatccttaat
                                                                      420
                                                                      480
qaaaaaqqct tctttctaaa aqaaqtatga gatagctatc caatactgca ggaacagtta
                                                                      540
tataactaac cgaaggaacc agcagcactc tgctaactct gttttagtgt agcaacctcc
ttcttggtgt tctactacca gccaaacatg tactccattg ctttggatac aagactttca
                                                                      600
                                                                      660
tetttttttg gegtttgtet gteagaaata acetgataat caetagtaga ggetttgtat
                                                                      720
gctgtagcaa gaggtctcat ggtagaaatc ctaggagtac ttccaggttg tgttggtgta
cctagagttt tgattggtgg tgtaaaggct aaagatggag atgataaagc acatctgtca
                                                                      780
                                                                      840
ctgctttcca taacactttt gtcaatacat ggttttacac caatcatgat ggattctcca
                                                                      900
aaaatcctcc catctttgct taaggctttc cgagcctgca gtttagattg ataacgaata
tgcatccaat ttcctgtatt agacatctgc aaagaataaa gctgtctcgt aaaatagaaa
                                                                      960
atatataaaa totgootota atgaattota otagaaaata g
                                                                     1001
```

<210> 4979 <211> 2745

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2747)...(1928)
<223> similar to gi574804 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4979
ttttttttt ttcaaatgta ggttgtttta ttgtaaatgt catcaaaatc cagaacagca
                                                                       60
gaaacatatt aatcagtttg aaattttaga aatcctttag cacttgaaaa agagtattac
                                                                      120
aaatgcatct atatcacata gaaagtcagc gaatacaaac tagacaagca ggacatagtt
                                                                      180
cttttctggc attccaggat aataagaata tttatcaatt aaaaggtcaa tatctgtctt
                                                                      240
cctgaaataa ctccaaacct gagtcaacac acattetttt cggattggtt ctgactggcg
                                                                      300
taagaagaga aatacagcat tttgtttttt attttgttta tctaatcaca qqqaaqqata
                                                                      360
aacaaagggc aaaagtgaga gaaaaagtta gatgtccttg aatttttttt tttagtggtt
                                                                      420
gctactgcat ttcatgtttc atttttgtta gatcatatac attagaaaag aatgatacat
                                                                      480
tttagagaag aaatatgtac atacatagta tcagaaataa ttttcttgta ttqattcatt
                                                                      540
taatatggtt gtgcttatat tcaatcagaa ggtcaactcc tttgctctaa ggttcttaca
                                                                      600
ctgctaacaa gaaatggctt ttttcctgtt gcaggtcatg agcagcacac agtgtccttt
                                                                      660
ctaggcacat aggatcatog atcactgtgt ggacgcaggo taatcagaat tgcacctgaa
                                                                      720
atcacttgtg caattagtga tgcaagagtg atcacaggaa tcaagactgg gagccaagag
                                                                      780
aaagaacaag aggtgcacaa agaagcagtt cggatgggag accaggaaag ctgaggggaa
                                                                      840
aactgggaaa cagattetgg aaaacteaca gtttgtttga tacceagggt taagagatgg
                                                                      900
gactttgata ggagtggtgc ttatgaatta agggaggaag aaagaggtga gatcctaatg
                                                                      960
ttggtaaagg tacagagaca aagggagcca accaagtggt aagaaactta gaaatggaaa
                                                                     1020
gtaaaaatga gacttaattc tttagtcagg gaagccaagc caccaggaaa acttggtaaa
                                                                     1080
gagtaagaga aagagggaga aaatatgaga taatattttg ggtattttgg tataactagg
ggaaccaaaa tattatteet atagtataaa aaggaacaaa gtaaagcaat atggatetat
                                                                     1200
tgggattece tattecacca atgaaaatta teaaacaata atttgtetet caggeaatge
                                                                     1260
tactagaagt tacttatata gttgccttat tgttcattta atttcagttt aactgaagcg
                                                                     1320
attitigecet titeetteet tetaegiggi caeteigeig tieaaagggi aageaeeatt
                                                                     1380
tgttcaggta aagcaattgg tgtttgaaat ccttccgata gatacgccat ctcagagggc
                                                                     1440
tgctaatata actaactgta caagacacac ataattttag gttggccatt cttgtgtata
                                                                     1500
ggggtaatct aaagctagta gttacacccc acaaaagaaa ataaattctt atgacctctt
                                                                     1560
tgatcccacc tgaaatatct cacaataaac aaacaaataa ataataagca aacaaaaaca
                                                                     1620
aacagtagcc ttccccagtt gcaggggcct aaaatatctc ctaatctgaa tttcgtctca
                                                                     1680
ggacaggaaa ctattccata ggcttcctcg caggcttctg tgctggagtt tgtcccactg
                                                                     1740
actitggitg tocatcict tacaagaagg gaacattcig aaacttagit taaatactac
                                                                     1800
taggccttag aatcttttgt aggtagttgc tgaaacttga agttgaataa tactttgaag
                                                                     1860
tactatgtta cattgcatta tgaaaacctt catttttgta gctgtctctt gatctgccca
                                                                     1920
acatgtcaca caaatataga agaaacggaa tctgcaatac cacaaacatt acttcccatt
                                                                     1980
ttgacatggg cataaccatc tactccccaa gaacttcccc aggaattccg cacaatccaa
                                                                     2040
tatggagtgc ttcctgtttt atcaaaccca gttatgagaa ctgcatgatt tqcttctcca
                                                                     2100
ctagageagt gatgetgtat aatgeeteec agataatett geeageteae tgeatetaet
                                                                     2160
atgactacca aagggccaaa ggtaagaagt gcttttgcca tttcatcttc ttggtcactg
                                                                     2220
aagtcatatg cagaataacc tttgattgaa aatccagaat gtgaaccaga aaagtaatgg
                                                                     2280
cacagaccat tttgtgcttt aaaaggatat tctgaatctt tcaccagttt tacttgcatc
                                                                     2340
ttgtttaacc agttcaaagc attgagagta gagcctccat tgcagccata attattatac
                                                                     2400
gaacagtcaa tgacctgctg gacacttagg tettecaggg getteceett tattgcataa
                                                                     2460
gcagattcca ctgccccac cacgctgaag gcccagcatc ctccacacat ctgctggttt
                                                                     2520
ctcacttgtg tcacaacctg cttgtccctc cagtcaaatc ttaacggcaa agacacattg
                                                                     2580
gggatggaca tatgtacttc tgctgagtat ctgggaaact tggaaggttt gcttcttaaa
                                                                     2640
```

```
<210> 4980
<211> 1377
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (42)...(951)
<223> similar to gi3979818 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4980
ggaaagtaac aggcaacgag atgctgggcc tcgaggaggg ggaccttgaa gacgacttcg
                                                                       60
accetgeeca geaegaecag eteatgeaga agtgetttgg ggaegagtae taeggggeeg
                                                                      120
tggaggagga gaagccacaa tttgaggaag aagaagggct tgaagacgac tggaactggg
                                                                      180
acacgtggga cgggcctgag caggagggag actggagcca gcaggagctg cactgtgagg
                                                                      240
accccaactt caacatggac geegactacg accccageca geegaggaag aaaaagegeg
                                                                      300
aggeceett gaegggeaag aagaagegea agtegeeett egeegeggee gtqqqqeaqq
                                                                      360
agaagcccgt gttcgaaccc ggggacaaga cgttcgagga gtacctggat gagtattacc
                                                                      420
ggetggacta egaggacate ategacgace tgecetgteg etteaagtac egeacagtgg
                                                                      480
tgccctgtga ctttggcctc agcactgagg agatcctcgc tgctgacgat aaggagctga
                                                                      540
accggtggtg ctccctaaag aagacctgca tgtacaggtc agagcaggag gagctgcggg
                                                                      600
acaageggge gtacagecag aaggeecaga acteatggaa aaageggeag gtetteaagt
                                                                      660
cactetgecg agaagaggea gagacacetg eggaageeac agggaageea cagagagätg
                                                                      720
aagccggccc acagaggcag ctgccagccc ttgatggcag cttgatgggg ccggagagtc
                                                                      780
ccccagcaca ggaagaggaa gcccctgtat caccccacaa gaagccagcc ccccagaagc
                                                                      840
ggaggagggc caagaaggca cggctgctgg gccccactgt gatgcttggt ggatgcgagt
                                                                      900
teageegeea gagaetgeag geetttggee teaaceeeaa aeggetgeae tteegeeage
                                                                      960
tgggccggca gcggaggaaa caacaggggc ccaagaacag ctcctgagca ccagggagca
                                                                     1020
ggcaggggcc tcaggctcct ctcctcaaat caagccctgg acaggtctcg cacccacaag
                                                                     1080
tactatetge tgeagagate eteteatetg tggeeaggea egeetgtaat eecageaett
tgggaggccg aggtgaaagg atcacttgag cccaggaatt ggagaccagc gtgggcaact
                                                                    1200
tagogagact coatototac aaaatgtggt gacacatgcc tgtagtccca gctactcagg
                                                                     1260
aggotgggga aggaagatca ottaaggoca tgagtttgag gotacagaga gotatgattg
                                                                     1320
caccactgca ctccagcctg ggcaacaaag caagaccctg tctcttgaaa aaaaaaa
                                                                     1377
```

```
<210> 4981
<211> 1175
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (171)...(377)
<223> similar to gi3876146 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

```
<400> 4981
cacctcagcc tcccaaggtg ctgggattac aggcgtgagc cactgcgccc ggcctatgag
                                                                       60
                                                                      120
tcagttttat atgtggtggc tctacaggag ggcccagccc cttagtgttg aggggaggac
accqaaqta agctqttcac tacttacttc tttaactttt acttgattta gttctgaaaa
                                                                      180
ctcgaatcca aaccetcaag aaaggeetgg gegaggacat gtacagtggg atcacegact
                                                                      240
gtgccaggaa actctggatt caggagggac catctgcctt catgaaaggc gctggctgcc
                                                                      300
gggcactggt catagcacct ctctttggga ttgctcaagg ggtctatttt attgggattg
                                                                      360
gagagegeat ettaaagtgt tttgactaga cagagetgga ggtcaagtee etgegettge
                                                                      420
cgccctctct ctagctgttt cacttagcct agagggggca agggcaggtg gggccactct
                                                                      480
                                                                     • 540
ggcctgcctg gtcctctgcg ttgtagtgct acctcaatct cgggagaaac agccctatat
                                                                      600
tctaacaagt tgagcacagc cttcttcccc ttcgtgtcta cactcgtttt cctttgtggg
cacagetace aggggetttt ggaageeeet aaceaeetac ttttcaacaa aaatggtact
                                                                      660
ttegttgtat taattgeagg acettaaeag gtagteaeaa tagaagggtt gtttetgtat
                                                                      720
tttaacattt ctatttcaca gtcaaactcg gcattcttca gtcagcttga ggatttagca
                                                                      780
ttgttaatct tggactccat aacttatgag tcctagcact gattttgagg aaaaggagga
                                                                      840
                                                                      900
tcagaagttc aagggaccgt gaaagccctc agagtcagca cctagtttga gaccaagcac
cetttegaat ceetggatgg etgaggggge tgaggeegge tetgaetggg cageteagee
                                                                      960
cctccccag agcccagggt cttgcacacc cctccctgta accaaggaac actctgaaat
                                                                     1020
aaaggtgaat ggctaaaatc tcatctgttc atcagtgggt acagcagata ggctgcagtg
                                                                     1080
aatgctatca ccatctactt ttctacgtcc atttcaaaac caaacattaa aaagggcata
                                                                     1140
gaagcagacc cccgtcactc ttcaaactga tactt
                                                                     1175
```

```
<210> 4982
<211> 791
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(448) (
<223> similar to gi6015436 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4982
ctggaaggac aatggagcac cagctgagaa gctcatcgtt ggattcccta cctatggaca
                                                                       60
caacttcatc ctgagcaacc cctccaacac tggaattggt gccccacct ctggtgctgg
                                                                      120
tectgetggg cectatgeea aggagtetgg gatetggget tactaegaga tetgtaeett
                                                                      180
cctgaaaaat ggagccactc agggatggga tgcccctcag gaagtgcctt atgcctatca
                                                                      240
gggcaatgtg tgggttggct atgacaacat caagagcttc gatattaagg ctcaatggct
                                                                      300
taagcacaac aaatttggag gegeeatggt etgggeeatt gatetggatg aetteaetgg
                                                                      360
cactttctgc aaccagggca agtttcccct aatctccacc ctgaagaagg ccctcggcct
                                                                      420
gcagagtgca agttgcacgg ctccagctca gcccattgag ccaataactg ctgctcccag
                                                                      480
tggcagcggg aacgggagcg ggagtagcag ctctggaggc agctcgggag gcagtggatt
                                                                      540
```

```
600
ctgtgctqtc aqagccaacg gcctctaccc cgtggcaaat aacagaaatg ccttctggca
                                                                   660
ctgcgtgaat ggagtcacgt accagcagaa ctgccaggcc gggcttgtct tcgacaccag
                                                                   720
ctgtgattgc tgcaactggg cataaacctg acctggtcta tattccctag agttccagtc
                                                                   780
tettttgett aggacatgtt geceetacet aaagteetge aataaaatea geagteaaae
                                                                   791
caaaaaaaa a
     <210> 4983
     <211> 739
     <212> DNA
     <213> Homo sapiens
    <220>
     <221> misc feature
   . <222> (3)...(337)
     <223> similar to gi310100 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 4983
agatageteg etgttgtttt tgetteagte etggtggaga ggacaetgaa gageageage
                                                                    60
cggggaagga gggaccacgg gtcatttatg acgagaagaa aggcaccgtc tacatctact
                                                                   120
cctacttcca cttcgtgttc ttcctagctt ccctgtatgt gatgatgacc gtcaccaact
                                                                   180
ggttcaacta cgaaagtgcc aacatcgaga gcttcttcag cgggagctgg tccatcttct
                                                                   240
gggtcaagat ggcctcctgc tggatatgcg tgctgttgta cctgtgtacg ctggtcgctc
                                                                   300
ccctctgctg ccccacccgg gagttctctg tgtgatgata tcggcggtcc cctgggcttt
                                                                   360
gtgggcctac agcctggaaa gtgccatctt ttgaacagtg tccccggggc agggactggc
                                                                   420
480
agetttttae ttttgaaatt caaaaagaaa etaceagttt gteecaaagg aattgaaatt
                                                                   540
ttcaaccaaa ctgatcatgg ttgaaatatc ttacccctag gaactggata ccagttatgt
                                                                   600
tgacttcctt ctgcatgttt ttgccaaaac agaatttggg gcacagcatc ttttcacagg
                                                                   660
gataaaaaaa tettgtgggg ecagteatte ttateetegg aatagaaaaa categeeata
                                                                   720
attttgagtt cccaacgcg
                                                                   739
     <210> 4984
    <211> 1212
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc_feature
    <222> (1)...(1213)
    <223> n = a,t,c or g
    <220>
    <221> misc_feature
```

<223> similar to gi1438534 in the genepept database release 114,

<222> (1152)...(465)

Run with FASTXY 3.3t00, default parameters

```
<400> 4984
ttttttttt tttggaaaag agaaagtaaa gatattccta attcagagcc aaaggtacac
                                                                       60
                                                                      120
agcagctgtt ggcgggaggc cacctagaga tttatcaagg acgcgccacc ccaccaggag
cccctcttga tcaccaagtg ctttatcttc caagtagtaa gtcaatcaag aggtttctaa
                                                                      180
agataatcca tttttgataa attagaatgg aaacagtgtc tctataatat acatacaaaa
                                                                      240
                                                                      300
gtgtcccagt tttcaactgt gagcaacaca ggtgcacaga ccaggtgtca gcgcaggaac
ccgacggcag gcatgctgat gccccccatt tcccgccact cccgacagct ccccgggcat
                                                                      360
ggccccgatt cccgccactc ccgacagctc cccgggcatg gccccgattc ccgccactcc
                                                                      420
cqacagetee eegggeatag eeegtgattg eetggeetea geeeteggee eeetgegtgg
                                                                      480
geggeteete eeeggeetet ggtttettgt geetgegeat gtgeetgtae ttgteeaegt
                                                                      540
acqccttcac caggttggcc accttcacgg ggttgatctc tccactcttg ctgtggcaga
                                                                      600
tettetgeac ggeettgege aggatgteet tgtacteete ettggteace tecetettet
                                                                      660
ggtagaaggg cttgatggcc agcttcacct cctccacagc acgctcctgc atgtgcagct
                                                                      720
                                                                      780
tetteatgta etecteette tiggittitet eegeagetag eetgggggee ggggtettet
cctccgagtt gctggctgca gtggcttgac tggctggctc tgaggctggg gtcagggcag
                                                                      840
                                                                      900
cqqqcactqq ggccaqqqtc tqtgctqccc cacaqcccac tagcqqcaqq ctcccctqaa
                                                                      960
qqatqaactq qaccgtgggc tggctgacca gtgcgcaggg tgggatgctt gagggctggg
                                                                     1020
ccqqqqcaqq cqqcaggccg gggctgtaaa cctgagaggg gtctgtgtct gggaacccgg
                                                                     1080
gttccggaag cacgtgactg ggaaagggca gctcggagaa cgcctgcctg acccctgtgg
gggccacate etecatgtee caggeteett eteggggett etgtggeetg tgaagtggtg
                                                                     1140
cccctggggg cccgacagac agggaggtgg gaatacggcc actcgagacg gtgatcgagg
                                                                     1200
                                                                     1212
cnnnnagete ce
```

```
<210> 4985
<211> 2299
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (4)...(1871)
<223> similar to gi5430747 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4985
gggtttcaga aagtgctttc tctctgtgga catgaggatt ggattagagg agtggaatgg
                                                                       60
gcagcctttg gtagagatct tttgctagca agctgttcac aagattgcct gataagaata
                                                                      120
tggaagetgt atataaagte aacatettta gaaaeteagg atgaegataa cataagaetg
                                                                      180
aaagaaaata cttttaccat agaaaatgaa agtgttaaaa tagcatttgc tgttactctg
                                                                      240
                                                                      300
gagacagtgc tagccggtca tgaaaactgg gtaaatgcag ttcactggca acctgtgttt
                                                                      360
tacaaagatg gtgtcctaca gcagccagtg agattattat ctgcttccat ggataaaacc
                                                                      420
atgattetet gggeteeaga tgaagagtea ggagtttgge tagaacaggt tegagtaggt
gaagtaggtg ggaatacttt gggattttat gattgccagt tcaatgaaga tggctccatg
                                                                      480
                                                                      540
atcattgctc atgctttcca cggagcgttg cacctttgga aacagaatac agttaaccca
                                                                      600
agagagtgga ctccagagat tgtcatttca ggacactttg atggtgtcca agacctagtc
```

```
tgggatccag aaggagaatt tattatcact gttggtactg atcagacaac tagacttttt
                                                                       660
                                                                       720
gctccatgga agagaaaaga ccaatcacag gtgacttggc atgaaattgc aaggcctcag
                                                                       780
atacatgggt atgacctgaa atgtttggca atgattaatc ggtttcagtt tgtatctgga
                                                                       840
gcagatgaaa aagttetteg ggttttttet gcacetegga attttgtgga aaatttttgt
                                                                       900
gccattacag gacaatcact gaatcatgtg ctctgtaatc aagatagtga tcttccagaa
ggagccactg tccctgcatt gggattatca aataaagctg tctttcaggg agatatagct
                                                                       960
tctcagcctt ctgatgaaga ggagctgtta actagtactg gttttgagta tcagcaggtg
                                                                     1020
geettteage cetecatact tactgageet eccaetgagg atcatettet geagaatact
                                                                     1080
                                                                     1140
ttgtggcctg aagttcaaaa actatatggg cacggttatg aaatattttg tgttacttgt
                                                                     1200
aacagttcaa agactetget tgeeteaget tgtaaggeag etaagaaaga geatgeaget
atcattettt ggaacactae atettggaaa caggtgeaga atttagttit ecacagtttg
                                                                     1260
acagtcacgc agatggcctt ctcacctaat gagaagttct tactagctgt ttccagagat
                                                                     1320
                                                                     1380
cgaacctggt cattgtggaa aaagcaggat acaatctcac ctgagttcga gccagttttt
                                                                     1440
agtetttttg cetteaceaa caaaattaet tetgtgeaca gtagaattat ttggtettgt
gattggagtc ctgacagcaa gtatttcttc actgggagtc gagacaaaaa ggtggttgtc
                                                                     1500
                                                                     1560
tggggtgagt gcgactccac tgatgactgt attgagcaca acattggccc ctgctcctca
                                                                     1620
gtcctggacg tgggtggggc tgtgacagct gtcagcgtct gcccagtgct ccacccttct
caacgatacg tggttgcagt aggattggag tgtggaaaga tttgcttata tacctggaaa
                                                                     1680
aagactgatc aagttccaga aataaatgac tggacccact gtgtagaaac aagtcaaagc
                                                                     1740
caaagtcata cactggctat cagaaaatta tgctggaaga attgcagtgg aaaaactgaa
                                                                     1800
                                                                     1860
cagaaggaag cagaaggtgc tgagtggtta cactttgcaa gctgtggtga agatcacact
                                                                     1920
gtgaagatac acagagtcaa taaatgtgca ctgtaatgga cttaataact acatgcttgc
agtcactggt atcttaaaat attatcatgt aaacaggtca tctttacctt cataactgaa
                                                                     1980
ttgagtttct gggttttttt ttttttggaa agggagtttg gttttgccac accetecece
                                                                     2040
tcccaggtta aagcaatttt ttttttcac cctcctgaga agcgggaact aaaggccccc
                                                                     2100
cccctgcccg ggttaatttt ggttttttaa gaaaaaacgg ggtttcaccg tgggccgggg
                                                                      2160
                                                                     2220
gggtttaaaa ctcctcgtct aagggaatcg gttggcctcg ccctcccaaa gggcgggaat
                                                                      2280<sup>-</sup>
aacgggcggg accccctgcc cccaccctga gttctttttt ttaagcccaa agcgagagcc
                                                                      2299
cttatttcag ggctaaacg
```

```
<210> 4986
<211> 1094
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (969)...(718)
<223> similar to gi9451 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
///
// Page 12 Page 12 Page 13 Page 13 Page 14 P
```

```
<400> 4986
 gaaaaccgga ggagcaattg gggatccagg tgtcagaggt aggggaacca ggggcaagct
                                                                         60
                                                                        120
 ggggctgagc tggaggtggg gatgagagca ggtgtgggga cagcaatacc cccttggggg
                                                                        180
 teacetetet getteeece teeceagget teagtteett ecceetgace etgacteett
                                                                        240
\ gaacgtcact gaaaacggca gctattgcaa ggagtggggg ccgcgggcag ccgctcttca
                                                                        300
 getegeggee caggggagtg gegaggggeg ceccaacece etgecegeet eteegeacaa
                                                                        360
 tacttgaaca ttcatctgta ctgaagtgtt acttgaaccg ggggaatctc ggacctgggg
                                                                        420
 gagccggggt gtgaggggac tggaccagct tggactgaga cctgagaccg ggccggtggg
                                                                        480
 egeceatttg ggaetgegee acceeeagge ttgttettgt tttaetgtat tgageggegg
```

```
caccegeegg accegeatta tggctggggg egecageeca agaatgggga ceatgggaet
                                                                      540
cctccagcct ggctcttccc actctttcat cgtcatggaa acttgtatcc catttgccca
                                                                      600
gggaactgcc actcctggtt gccatggaaa tagcagccaa cggacacctc ccgatgccag
                                                                      660
tgctaagget ggaaatggee eestettagt tgccatggga acctagtaac agaetetget
                                                                      720
ggccctcctt ccctgcccct tcctcgageg cggggtgggg cttcgggacc ccggggatga
                                                                      780
geogggceag gtcccgcccc tccgcgcagg cctccggggg ggccggggct taccatgtag
                                                                      840
gggagggag atctatccac atacctcagg taacagggag gtgcgcgggt ggggggaggg
                                                                      900
ctgggcggac caaaggccgg aggggtgggg cctggggata gcgagaggct tgagaatggg
                                                                      960
                                                                     1020
geegettggg ggagggaaga ggeageeegg egaggggeaa gegggggaee eageeggget
gggcccctgg gccccgggtc tgtacaatac ggtttgctat aaaactcaaa atcttccagc
                                                                     1080
                                                                     1094
cgggaaaaaa aaaa
```

```
<210> 4987
<211> 2632
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2309)...(1375)
<223> similar to gi2062609 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 4987 ttttttttt ttaggtgtaa aaatacagct tttattctga gacattgacc ttcactagag 60 tgggacctgt ggccccagcc tggctggaga agcagtccca gggcctgagt gacaccattt 120 ccctttcctg aaataggaac aagttattcc aaaggagaaa ggagagccca gagagatctg 180 tacaggacct ctcttgcaca tggtgactgg aggcagaggg tggggagctg gagaggagtc 240 cagtecetee aacaaatatt gagggettea aagagetett eetggaegtt tetettaate 300 tggatttaaa agggacagga ggtatettag ggtecaagaa cataacagga atgggeaact 360 ctagaagtgt ttgtgtgtgg aaggccctaa cctggccctg tcctccctgt ctctaccttt 420 ggettteatg aagagagatt cacageteag aggaagggag gaatttetee agtetteact 480 ttaacaaact cttttaagtt ttctgcctac cttatgttcc ctttggccaa tgacccactc 540 cctgggaaca agatcttgtt gactttcttg ggaatctcct aagagataag tgctttgtgt 600 cggagacaag ttcaggtaaa ccaaccaagg cagtgcctcc cacagtcaaa gagagaagct 660 ggagggccaa agcctataga gttgggcact acagctgctc atgctgcaga ggagacagct 720 agtcaggaac cetggagatt caagacaact tgetggteee etttgeeeag ggetgtggte .780 ctaatcacag teetteacet tteecagggt tageetgtgt tteaaatgea tatgatetge 840 gctgagagga caacaggggg tcaggaacct ggggttctct ggggggcaga ctaagacgac 900 teegggatee agaceettet geacetteag atgggagete caggeageta aggggeegag 960 gagaatgggc agagatcatg ctacaagggg aggttctggg gatgaggcag taatccccac 1020 cetcagtaca ggtetgggtt egeegaacte ettgageete agteetttgg eggteeeggg 1080 ctagggccac agcagcatca aaggaaagac tacccccatt cctccaagag gatcgagaag 1140 ctcgggaccc ccaagccctt tctccaggag tcccatcaag ccggccaggc ctcgggcatg 1200 gatttgcagg tgccacatga atcttgctac acattgcact gggcatcttg gcaaactgtg 1260 gcttgggggg caccacaggc acagagcgga cctgttggac ctgaaccaga gtggaagcta 1320 gacgcatgcc cacgccaccc aggccaagag aacaggggca tagacagccg tctggactgg 1380 getgeeeete aggeteeate teetetgget gaggtggetg tggggetaee tetteeatet 1440 cagaagagtg aggattgccc tctttggcac agtcaacctc cagggacgct acacctgaac 1500 cttcagagag ggtgtcctct tctaaatagt accetccage cetetggtet ceetcagect 1560

```
ctccatcccc actctcccgt tccttgctga cctcccctgc tcctccttca gttgctgctt
                                                                     1620
ctgggcttct gctgtcttca ccatctcctt ggtcttttct tgcttcatgg taccccttct
                                                                     1680
coetetgtee titgteetea teetetetga eteeteage etettgttte tgtacaactt
                                                                     1740
cccatttctc ctcagcaact tgatcttcct gggccccttg ctctaggtcc cttccagctt
                                                                     1800
ctacctgggc ttcctcttt tgttcatcct cttctctctc aatttctttt tccttctcat
                                                                     1860
                                                                     1920
ctqtatactc atctcctcct ggttcctcca cacctttagc ctccatactg tcagccttct
                                                                     1980
tetgacettt ggaettetet teettggeet etgtetette eetacteeet teteteaate
tgacttttgt ctcttggctt cccccagcct cccctctatc ctcactggcc tttccagcct
                                                                     2040
                                                                     2100
ccaccttggt ctctggactt ccctctgcct cttccctgat gtctagcctg cctccaggct
                                                                     2160
cagcatgett gteeteecca actteecage atgeetgete tteeccacee tgteecagag
                                                                     2220
cctgccttcc acatcctgct gcctcgccct ccagactccc tgaacccttc cagattgggg
gtttaggtcc cagaagggga cttaggtcat cataggcact caggaaaact tcctccccat
                                                                     2280
                                                                     2340
tttcctcctc aacttcaggc ctggggccag cggagtccag ggaacagcag ctgggggcca
                                                                     2400
agacaaactg tgcctcatcc agagacaggt catccagggg tggctccaca gagaactcct
                                                                     2460
ccacctgagg cccaactccc aggagetect ccaggtagec cateccaggg tegteetece
                                                                     2520
caggggagaa ggctgctcct gctgcttctg cctgggccac ctccccatcc tctgccccca
                                                                     2580
cccactcagg ttctgagctg cttgagtcct ctaggaagga gaaggagtcc tgcacctcct
gggacagcga gtcctccagg gcaggagcca agtcgtctgg gcctgagtct gc
                                                                     2632
```

```
<210> 4988
<211> 997
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (837)...(122)
<223> similar to gi4176443 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4988
                                                                       60
gegeegggge tgaaggeetg gtetetgtet aggteeatat gggtteeagt tetggetttt
gttccgagac accctccgc acatttgaaa tcaaagggtc agcaggaaaa gatctgaaat
                                                                      120
                                                                      180
gtgcagagac ttttgtgcct tcactacctc ttcttttgaa ctgtagcgga ccagagcatt
                                                                      240
teegtgaggg aggtteaggt ggaatgtgat cagegggeeg tgetgeatge acagagtgeg
                                                                      300
cagagttgag ccatcgatct gaggtgtaag gttttttaga acaagccaat ttgttattct
                                                                      360
ccctgagctg ctctcacccc agctggaacc tggggtatat ctggcgtcag aatttcccca
                                                                      420
tectecacet atacgaaggg gagaattate ecacgtagae aagggtgget tetgaceagt
                                                                      480
cagtcccgga ggtgggcggg acggagcagt gatgttttta ggtggcaaag ggaccttcca
cageteatga gecagagagg tgtttgtaac tgaaccagga gaecatgtea atttggaate
                                                                      540
actatttctg gctgaagtgc tttgtgctgt actgctgagg ggaacgttgt agttggaggc
                                                                      600
acgaatggat gaccaggcac tagttgaagg cagcgtggtg ttcaaggatg aggatgaccc
                                                                      660
                                                                      720
actgttcctg tccctgaggt ggtcaacttc ccgcacagta ttaattgaaa gattgtttat
                                                                      780
gacactgcca ggagtgacgt aagggtcagt ttcagggtca atgtttggat aacctttcca
tggctcacca ggacgaaatt ttgcccaaga cttcatgctt aacttttcct caatcacttc
                                                                      840
tgcattcctt ctcatccgca cacgtcagtc taagcacgcc gatctgggct acatcagtag
                                                                      900
taagtocaga tgtaacaaaa ccatgtttgc tggagttttg atccaaagat gtgttcacag
                                                                      960
                                                                      997
aaatgctgtc cactgtcgtc cacttcctta gtcttga
```

```
<210> 4989
<211> 2249
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (2250)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1833) ... (1669)
<223> similar to gi4056411 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4989

```
gtagaggtgg ccccttctgt ccacacgcca tgaggtcgtt cccactctcc agcaacttga
                                                                       60
                                                                      120
ccggtttagt aaaaaacgat gagctgaaaa accacatgca ataaacaaga aggagcagcc
                                                                      180
aacaaaatct cttaaaatct cagaaatgtt caataaacat ttgcagagcg agaaaataaa
                                                                      240
taacatcgca aaggagccag tggctcctct tttccccgca tgttccttgg gtcaggggtg
                                                                      300
catgtgtctc actagaagtc acatgtatta aaagcaggtg agttccagct ctctctacaa
                                                                      360
ccccactggc ccccacccaa atgctcccaa cgggtccctg acaccctcgc tggtagctcc
                                                                      420
tgcctttgat aagctcctct agcctcaact gcttcttgat cctggctccc ttcccagaca
                                                                      480
ggctgcccag aaccetggtt catctgctca ctggagccgc tttgccagcc agccagagac
                                                                      540
cccctcccag ccatggccta aagagccaac agctgggaac ttgggctcat ccccagetgc
                                                                      600
gtctggtcgg cttggcggcc aactggaaaa cccagggcct ccatggcgct ctggacagag
qaqqcccqa tcccaqccc ggctgccagc caatgccagc ctgtccactt gacagaaaaa
                                                                      660
cacacgetgg eegeetgeee cagggtgttt eeagaagaga aatttaatet aatttacata
                                                                      720
                                                                      780
cttctaggta catcgataac caaaatgtgg ccactgaaaa aagttaaaaag gtcaatcagc
                                                                      840
tcctggcttc tagctggccc aggattgcaa aataaaaaga tccacgttcc ttattctcta
cacaaaacgc gtttttaaaa aagtgaaagg tctagggagc tatacataga aagcaacagt
                                                                      900
gaaaagggag agggagcagg agtgggggag gagagtccca cccccaacc ccaccctcca
                                                                      960
gggccccaga gcccctgagg ctctttgggg ggccttgaca tggcaggagg cagctgtcag
                                                                     1020
ctctgagctc ttcccagctg ggaaggcccc tctcgggggc agccaacaag gatttccgtg
                                                                     1080
                                                                     1140
gcattgtggg ctcagtgggg ggctcccagg ccccagcagg ccccacagag ggagcgtggc
ttcccctgag caagcaccgt ggcatgatgt ggtcgttcaa cccaggaact gggggtccgg
                                                                     1200
ggcaggtccc gggtctcacg aggtgcgtgt tgtgtgtgtt cgcatgtaca tgtgtgtgag
                                                                     1260
                                                                     1320
aggatattca tgggggagag agggaaccag aacaggggtc tttgggggtct ttgcaaatgg
                                                                     1380
ccacggatgg cagacatege cetgeetgge tgetagaegg gggagtgetg teeteceetg
                                                                     1440
tgaccagacc ggctgccatc agagacctgg ctgctgcccc tgctggacca ggtgggcatg
                                                                     1500
qqctqaaqqa aqacaccetg tggccccaga gtcctcgggc tgggggaagg gcagctagct
ggeteeegge geeetggetg tagtgtgeee ggeeeceaag gggegeeggt ttgaggtttt
                                                                     1560
                                                                     1620
ggcttgctcc tttggaaacg gaaagaaga ggaagagga cgaggacaca gaggaggaag
                                                                     1680
aagaggagac agaggtggca cgagagggga tctggaatgc ttttgtgtta gggagcctct
geogeogetg tetgtgeetg eggggeetgg gacteeteag gtggggggte egetttggag
                                                                     1740
aagttcatct ccaggatgtg ccgctgtaag tgccgcaccc actcttcctg gatggagagg
                                                                     1800
                                                                     1860
gggccctgga attccacctc acagaacctg catgggggaa cagagagagg gagtggccag
tgctgtgagg agaggcggaa gcatagcctt gccagcatcc ctgggcacac ctgctgctac
                                                                     1920
tcagtgtgga cagagccagc ccaggaggcg ggggaagagg gacccagaag tcaggcgttt
                                                                     1980
cccatggaca gccacctcca ctcaccatgg ggtcatggca gggtctcaca gagacccctg
                                                                     2040
```

```
cetetgtget cagaagteae tggtgecagg taagggetae tggetteeag gtacecetge 2100 catetggeag atacatagaa tetgagacag tagagggeae agagaageaa ateetaceaa 2160 aegeaceaag eeceegetet eetgeeteee gtegaceegg caatteeggn eeggtgggge 2220 nggeggagae taateaatgg gtttteaat 2249
```

```
<210> 4990
<211> 933
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(678)
<223> similar to gi2618752 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4990 geggeegegg ettegeetae eecagegage teaaggeeca egaagtgaag eatgagagtg 60 geogetycca tytotycyte gaytycygee tygaettete caecetyaec cayeteaage 120 gccacctggc ctcccaccag ggccccaccc tctaccagtg cctcgagtgt gacaagtcct 180 tecaetaceg cagecagttg cagaaceaca tgeteaagea ceagaacgtg egaecetteg 240 tgtgcactga atgcggcatg gagttcagcc agattcacca cctcaagcag cactccctca 300 cccacaaggg cgtgaaggag ttcaagtgcg aggtgtgtgg ccgggagttc accctacagg 360 cgaacatgaa geggeacatg etgatecaca ceagegteeg geeetaceag tgecacatet 420 getteaagae etttgtaeag aageagaete teaagaeeea catgattgta caetegeeeg 480 tgaagccatt caaatgcaag gtgtgeggga agtccttcaa cegcatgtac aacctgetgg 540 gccacatgca cctgcacgcc ggcagcaagc ccttcaagtg cccctactgc tccagcaagt 600 ttaatctcaa gggcaacctg agccggcaca tgaaggtcaa gcatggcgtc atggacatcg 660 gcctggacag ccaaggtggg tgggccaagc gcaatggaca gagcaggaat gataccaaca 720 tgacgcactc aggagcctcc tgcccagtta gaggagtggg gaggctggcc aaggctgaga 780 cttcgttggg gtgggctcag gtctggaagg ggggtaccct ggaaggccat gatgacaata 840 acgatgggat atttatgtet tetteaaagg aettaaatga gateaegtaa acaatataat 900 aaaaatcata actaacattt attgagtgct aaa 933

```
<210> 4991
<211> 1935
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1198)
<223> similar to gi726403 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4991
                                                                       60
qaqqaqatca tcgccctctt catttccatc acgtttgtgc tggatgccgt caaaggcacg
                                                                      120
qttaaaatct totggaagta ctactatggg cattacttgg acgactatca cacaaaaagg
acttcatccc ttgtcagcct gtcaggcctc ggcgccagcc tcaacgccag cctccacact
                                                                      180
                                                                      240
gccctcaatg ccagcttcct cgccagcccc acggagetgc cctcggccac acactcaggc
                                                                      300
caggegaceg cegtgeteag ceteeteate atgetgggea egetetgget gggetacace
                                                                      360
ctctaccaat tcaagaagag cccctacctg cacccctgcg tgcgagagat cctgtccgac
                                                                      420
tgegecetge ceategeggt getegeette teceteatea geteceatgg etteegggaa
ategagatga gcaagtteeg etacaacece agegagagee cetttgegat ggegeagate
                                                                      480
cagtegetgt ccetgaggge egteageggt gecatgggee teggetteet getgteeatg
                                                                      540
                                                                      600
ctettettea tegageagaa ettggtggee geettggtga atgeaeegga gaacaggetg
                                                                      660
gtgaagggca ctgcctacca ctgggacctc ctgctcctcg ccatcatcaa cacagggctg
                                                                      720
tetetgtttg ggetgeettg gateeatgee geetaeeeee aeteeeeget geaegtgega
gccctggcct tagtggagga gcgtgtggag aacggacaca tctatgacac gattgtgaac
                                                                      780
                                                                      840
gtgaaggaga cgcggctgac ctcgctgggc gccagcgtcc tggtgggcct gtccctgttg
                                                                      900
etgetgeegg teeegettea gtggateece aageeegtge tetatggeet etteetetae
                                                                      960
ategegetea cetecetega tggcaaccag etegtecage gegtggeeet getgeteaag
gagcagactg cgtacccccc gacacactac atccggaggg tgccccagag gaagatccac
                                                                     1020
tacttcacgg gcctgcaggt gcttcagctg ctgctgctgt gtgccttcgg catgagctcc
                                                                     1080
ctgccctaca tgaagatgat ctttcccctc atcatgatcg ccatgatccc catccgctat
                                                                     1140
atcctgctgc cccgaatcat tgaagccaag tacttggatg tcatggacgc tgagcacagg
                                                                     1200
cettgactgg cagaccetge ccaegeeeca ttegecagee etceaegtee teecaggetg
                                                                     1260
getetggage tgtgagggga ggtgtaggtg tgtgggtgae tgetetgtge tgegeettet
                                                                     1320
catggetgae teaggeetgg ggeatetggg cattgtaggg gtgcagtggt atgtgccae
                                                                     1380
cccictccca ttatccttta gctttaggcc aagagcgttg ctcagggcag cttctgccca
                                                                     1440
                                                                     1500
gggtgggtgg gactgagcag gatggatttt cttttgataa aagagtcgat gcctgaaaga
                                                                     1560
gaaaccattt ccttgattgt gtaaggaact tgctggacgc acattagaga ataaagctcc
tgtttctagg ctcctatgtg ccacctgtgt ccctgctact gccactccac ccccactctg
                                                                     1620
                                                                     1680
gggaggggaa gccctccctg gggaagtgga atgcaaggga cagagtttgt ggagtgccac
ctgtggtctg tcacctccaa cgtcgcacag tgggtgctgg cccaacagtg aaacatggaa
                                                                     1740
                                                                     1800
gatecaggag geettegeat ggeeatttet ceagggacet geagggaaag egttetggga
acagcatgtg caagggtccg gaggagcgag ggcttggggc cactgaggcg ctgtggctgg
                                                                     1860
tgaagagcag tggggcggga gggaccatcc gggtgacagc aaagggccct gtgccggacg
                                                                     1920
                                                                     1935
cgtgggtcga cacgg
```

```
<210> 4992
<211> 928
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (684)...(563)
<223> similar to gi3687497 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4992
taaaagtcag aactcattta aagaacttta agggatcctt tagaaacatt tttacttaat

3598

60

```
ttcaaatgag tgggctgagc atgtagacta gcagcttttt atcaaacctg gcattgtcag
                                                                      120
                                                                      180
gttgaactta taaatacgaa taattactac tctgacttgt aaatgtagct gctaaagtat
                                                                      240
gaggtatatt taagaagaat agattagttt cattatacct ataagaacaa gaattcaaaa
                                                                      300
qtqaggtagt catccaggtt ccccctccca caatattttt gtatcataaa atttagatga
                                                                      360
cttttttqqq ttacattttt atccatatat tttgaactaa cagaacttgg cagaatgtgt
gttgaatatt ctttacattt aacaattaaa aacaactaaa actgaatagc aaatagttta
                                                                      420
                                                                      480
ttggtaagta cacggtttca acgggagtaa taaattcaca tgaaaaggag acaataatca
                                                                      540
agtcaaaaga ataaatgett actaatcatc agaaaatctg tggccattag ggctggcacg
                                                                      600
taaaaatcca aaatcactca gaggccaaat cttaaagaag attcgtcctc ttattagtcc
                                                                      660
atatggaata ggtccatagc acctggaatc tgtagaattc tgtagattgt caccttctaa
                                                                      720
ccaaacatga cccattggca cctagaatta gagaagaaat gcagcctctt aaagataaaa
                                                                      780
cctaatttgg gtactataat taaaaagcat gtcattcaga ggtagggaga aatgtcctaa
                                                                      840
ggctctcttt tatagaatag atacaaatcc taatattgca tttttgcttt tatttcttgc
                                                                      900
acaataactt ttactaaata tcaaaggttt caactttttt aaaaacctat catcttttt
                                                                      928
tgtccgaacg cgtgggcgga cgcgtggg
```

```
<210> 4993
<211> 3675
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3676)...(1630)
<223> similar to gi2072501 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4993
tttctctgcc tttctatctt ctttactatg aattctgaat aaaatggaga acacactctc
                                                                       60
aatatgtaga aaaataaaat tttggcaaaa caataattac tgtttttctg tatgtactta
                                                                      120
gcagtgaaat atttataggc aacagatttt aagaagtcag ttccatggct attaaaaaaat
                                                                      180
gtttaagtta atgaaattta cagtgcatat taaaagcatg atacaaatgg aaatttaaaa
                                                                      240
                                                                      300
ttttgtatta ggaagcccag cttgctaaaa gtagcattaa tatcattcac atcagatttt
aatttgttac acatttttgt agttcagcaa aggcccctat gatgaaaaac aattaaaaag
                                                                      360
tgttatgaca aaaataatta tctcgtgtaa aaagggggag acccaaaaga tttttcatat
                                                                      420
                                                                      480
ggttatttaa ttcagttaaa tagaactgtt atgaatttga gaggaatgaa gatattcaaa
cactaacaga aaatcattag ccttatatta gagcattcaa atgcttatgt aactcttcaa
                                                                      540
tccatccggg cttccataaa aaccaaaatt ttgaacacaa aaaagtggca gagtttacat
                                                                      600
taccttttgt atgttcctaa gtatgaaatt gcatcaattt attatgaatt aaatttgaaa
                                                                      660
agcatcacag atttaaaaac aaagtacaaa agaaqettga ttetttttaa ttecacaaat
                                                                      720
acctagcate teaaagtaae atgtaaaeaa aettetatge tgeteaatga ateetteeaa
                                                                      780
tttcgataat aaactaaata gtattggatt tägtatatga ctttcatggg taagttatgg
                                                                      840
ttctatccat tactttaaca atattactga tgtaacagag aaaaattttc cactattgta
                                                                      900
tttatttaaa acaaactgac aagttcaagc acctgttttc agaaaagccc agcagcattt
                                                                      960
ttttttttt aacatactca aagtaagatt tggcctaagc ccttaatacc tttctgaaca
                                                                     1020
gccatgcaac taaacaccct caggagatgt tacataaggg agagaagaac atggagcaat
                                                                     1080
ttgcactttt tcccctagat aatattaaca aggtaaagca aatccagatc tttatgaatg
                                                                     1140
aatggctgtc atgtttaata cacttggagc tctataaaac tagagccact atcatatatg
                                                                     1200
tttatataga tatatatgta tttttaataa agtctctcac ttgcttcaaa atttaaggat
                                                                     1260
gatettttte etggteagte attteaaggg aacaataaat aaagtagaaa aggatgaact
                                                                     1320
```

```
gttttgcata tttctgtgga agaacggaaa acatactttg agaggttcgg aaaattcact
gtacagaatg aacagcttat atacactatc tgtgcaattt ttcttggctg gggtatttaa
                                                                     1440
atgcaagage teetecaaaa taagaageea catteattet tgtecaaate eetetgtete
                                                                     1500
ttctattgca aaaagaagtt tttcctttag ttgttcataa ctcttatatg gtggtagatc
                                                                     1560
caagcgatta aaacatgtat ggcttcttgg taaccaagtg tctttgccaa ctttttcaat
                                                                     1620
gcaaaacttt tgaggcccat tacttcccat gagctcagca aatcctccta gaggtaaacg
                                                                     1680
graggities gigargaact graataging cattettact traiting totatities
                                                                     1740
aaactgccaa aaccaaatga tttgcttgct gtttcttgta taatgtcgat aaacagtatt
                                                                     1800
tetetgecaa tetgecaagt caaceteetg catgecacae aacataacet etaattettt
                                                                     1860
ttcatcgaag tactgtagcc actgaagagg aacaacttca ttaaaaccat caaggaaagc
                                                                     1920
tttggtctgt tcttgtactc ctcgagaaaa acgccattct gtcattaaac caatatattc
                                                                     1980
atctttgttc tcctcagtca ccagaatatt ggaacctccc aacttcaggt catgtgaagt
                                                                     2040
aacttttccc aaaatctcca tgtcaacaga aaagtacatt tctaagccac attcttcaat
gttgttatct cttatccaga taagggagtt ataaaattca gtatcaatag attccaaatc
                                                                     2160
cttaatagta agttttttac ttaacatacg cttgtagaat ggtaaagaga aaccagtatc
                                                                     2220
gataaacttt ccatgaaata gtgccatggc aataaaacga ccaatgaaac agaagtatga
                                                                     2280
aagatggtet ggattaatgg ttgatgetgg atttatetge agacaatagt tgttettgee
                                                                     2340
cgcatactca aataagcaat acattgggtt caaaacttca tgtgaaagca agaaaaacca
                                                                     2400
tteteteget aggecaccat aatcaagtee ttetteteet etaaatatta catataageg
                                                                     2460
cctcctcaag tcatagggtt ttaatgccat aatctgttgg aaggaatctt caaacaatgt
                                                                     2520
ctgccgggac acattgatct ttacatgact aggtagtgca ttagactggc acaaataacg
                                                                     2580
gaagtgagca agettecace taaageegeg tteataagea atttgtggae caeetttagt
                                                                     2640
tacagatgac ttcccattgc gaggatettt gaatgttgtt gttcttgtgt tatgatcaac
                                                                     2700
aaagtacctt acaccttcac gagtatatct aatttcccag ccttctggca ggggttcttc
                                                                     2760
attetgtaag cettgagtte ttggatette ceactgggtt gtttttgtgt tatgatteae
                                                                     2820
aaagtaaacc ctgtctgttg aatccactct tttttcccag cctggtggca aaggtccata
                                                                     2880
agggtcattt tctgcagcta acattgaagc cgaatagagg tatcgttggt taaactgttg
                                                                     2940
catagetece tgeaattggt teegetgaga ttgeeactgt teaaaattte ggacagatte
                                                                     3.000
catggtaggc cgctgccacg ttgttgttct ggtgttatga tccacataat aaactcttct
                                                                     3060
acgatcatca actottottt cocaacctgg aggtaaaggt tgtggtotot cocatgtggt
                                                                     3120
agttegagta ttatgateca cataataggt tetaceatga ggatettite tttgtteeca
                                                                     3180
ccctgatggc aaggtttctg tgttggcatt cccagactgc tgccgtacag gatccataca
                                                                     3240
cccatctggc tgtcttgatt tggctgcttc aaaagcagaa ctacttctag aattagaggt
                                                                     3300
gtcaggctct aatatacttc tagcttcaga ttccaattct gcactggtag aaggaataca
                                                                     3360
ttcattgttt tctgaggaag tcagtatttc ttgaactgga ggatcttcaa cagtagtact
                                                                     3420
agtgcaattt ggagacaagg cattttcttc agacactact ggagtacccg tgacagacgc
                                                                     3480
attatcagtt ggtgcaaatg aggatgattc tccattaaca gtgtcatcgg caggctcaga
                                                                     3540
tgcgagtggt tttggagctg gtgtattttt gggtctggca gcaacctgag acggagatga
                                                                     3600
aggtgtgttg tctccattaa ctacatacga gcagcatgag ttttggacta gagtgcttgt
                                                                     3660
aggtacatga ttagt
                                                                     3675
```

```
<210> 4994
<211> 2633
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2634)...(325)
<223> similar to gi55819 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4994 ttttttttt ttaaaattat gtaatcattt atttataaaa taacaaaaat ttatgaatag 60 atctgtttat tgtactgtga aaagggtctt ggtacatgaa acattatata ctttgaggac 120 agcattcaga actgttaaga caaaagacaa actataattt taaactcaat cttgatttaa 180 gggaaaggct ataaattatt ggctgaaaag tattcagcat gaactcagat tctatataag 240 catgaaagag tacaaaagat gttggagtcc agtaagccca tacctaaatt aactgtaaag 300 cttcaaggac tttttgttta tttttatata ctagttttct tctgtgacaa gttgatttta 360 tetecaagae ttaaggeeat teeetggete tttgeaegaa ttettatatg geeggtaaca 420 gcagcatctg gtccctggtg aattggcttc tcaatgctga catttgcaag tgcatcttca 480 ccaaatatgg aacgagcata aaggttggct gccataaagc cacagtaacc agaaagggcc 540 ttttctggag tcaggcattt catattggtt gactttaata tgtgctgtaa gtagtcattt 600 aaatcaacca tgttggtgtt aactgtcact ttgttttccc attcaaattc ggcccacatc 660 tgacggaatt ctgcatcagt gcaagttgca ggctggatat agtccatgat gtcgatgtga 720 atatcactga gaaccacaca atttctgtca cttgctgctc cagagacatc ataaactata 780 ttaccaaaaa ttattccatt ttctgttgat gctactttga cgttagcttt aatatttgcg 840 aagtcatgag gagcaagagt caaaggagac ggcttttcca caagtttcag atcccctagt 900 gtagctagtt ctaatgtgca attctgcaaa gtatcactgg tttggttcac aacaagtaca 960 tccaggacaa tatcatattg gttgacatga acgtaagctt ctgcatatac aggatctgag 1020 aaacctgtca attgggtgac cttgttaagt ttagatgcta ggggatctgc tgcctctttc 1080 ctctgtgtgt tacccattgc tgccagtaaa ctcagctgaa actgatcttc cttgcagttc 1140 atttcattct tagcagttag ttgcatgaag gaaatggggt catcaggctg tactqtcaca 1200 ttcctctttt cagattcttt cttttgggat aatttctctt cttctaqttt aqcaqataac 1260 atgtgagaaa gggactgtct gcattcctta ttgaaaatgt cattcattaa aggtgaacat 1320 teagacaaga cettgaggea cagggaaatt egatecaeat cateateagt aattggette 1380 ttaggaagag aggattttcc caaatgcagg atagtagcca tgagcaacat agcctcagca acaaaagaat tttgcttttt cttctcctga accaaagcta catagcgcaa tgcaatcttq 1500 gtcagagttg tggcaaggga ggcagcaaca aagaaatctc catccagaag gaatcctctc 1560 aagggaggtc tgtcttcctc tttcttggtg ggtctagaac tgctaagggc actctgagtt 1620 gcataggtac ccatttcagt aaccaatttc tgaactggcc ctacagttat ttcttcttca 1680 ggttttaatt caccagette tttetttatt tetgaeteta caattgggat etetecaagg 1740 gacctgcgga tctcagtcat cacactctga atgtcttcct tggtactaca gtattctccc 1800 aggatecata atgetecteg gtaaatettg acagatttaa tagcatgaaa gaetteaage 1860 atcttctcaa caataagcat tctcaggtta tcaaagcgct gaatggcttc acgaacaaac 1920 tecaagacat cageagetge tgettegttg ttgtcaetga gaaattecat taacacagga 1980 ataacatttg cagccatatc tggaaatcgg acagaacagg aatgcaatgt tcgcactagg 2040 agttgtctgt atttgtcagt atcttcatgc tcagacacat tatttgtttt tatcacttcc 2100 ttcttcagga caataaccag ctcttcaaca tttctagaag agacaagatc cagtgctaac 2160 tgcagagttt tctttcgtac ttctaagtct ggtgtgctca atactcttag gatatccata 2220 accagatect gtagtacteg tteatgagea ggatgetett ttaattetat caagegatee 2280 aaaactatga gttttacatt gttgtcgctc tccttaataa ttaaatcaat gtaacactga 2340 gcagcagcct tgattgcagt tggtgcacta gagagtgtca ctaatgtccc agcagcttca 2400 tattttacag cagggetgga tgactgtaat aagttataga tgcagegaat aaaacgaget 2460 ctttctgatg gattagcatg acagccctta taaatcagtt caacaataac cagctgcaga 2520 atgtetecaa atgtttgaae ttgateaatg caagtaetta agtaatecaa agetegatee 2580 tgatctgcat gaattagcat cataaatgca ttccttttgc aacttgcatc ctt 2633

```
<210> 4995
```

<211> 2756

<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (2734)...(1931)
<223> similar to gill30494 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

<400> 4995

ttttttttt ttcatgttcc cgtatgcttt attggaatgc tgtcaggtcc gcgccttcca 60 cctgggccct cacacacage aaggagagge cccagcaccg gtcccaggec cacctgcccg 120 cacctgcaga agggaaaggc catcaccctc cgtggacggg gtctcggcca ccacatccac 180 cttctgaagg tggcccagac acctccacgc tgctgactgc acttcccatc aaaagggact 240 ccctggggca gagtgggccg tccccctacc cccgaggaag gcaccctcct gggcggggac 300 agacettgge tecatgetge caagteaagg tgetggegtg gaaacaggea catgtggaae 360 accacatece actgtecaag gtggagteca eccetecteg gageacteag eccaceaggg 420 tccaagcagc cctcgggaga taccacgcgg ccgcccacgt ctcagcttgg agaaagacac 480 540 tttcccggtg gcttctcagc accttgagcc tctgatgccc cgcctctgac ctcaggtcca 600 660 actacageag gtggctgctt cggtgateaa atccctccgt ggcagccaag gacaccggcc ctccacacca gctaccaaga gggctggtgc ccacagggag gaccgggcgc caggagggct 720 cgctgaaatc tcggtcccat cctgttctgc aagtggctga gtccctaggg tgggacgagc 780 acaggggctg aagggcccag gctgctccag gagtgctgca gacggcgacc gggaaqtggg 840 gtgaccaggg agcatggcca aggccagagt gatgagcatg gtggcaggga ggagagcacc 900 tcacgtacaa actgcacgag cttcgggcgc atgcatggct ggccaagact gagggtcaca 960 cagggcagac aagggagacg agtcacacgt ggcagcacat catccagtcc tcggggaggt 1020 gagggttggc atgtggcggg caccggtgtg cagggcagcc ccatcctggg gctggagctt 1080 dectagacce aggeaceacg cacaggeate ecetgeteag etectgaace eggeecetee 1140 tgcctggcca cgtccgctat cgcaccctcc tgcatcaggg ccgagggccc accctgcgct 1200 cetttttett ccagggtgtt ccaggatggt caagttecag cactgagaac agetcaggtg 1260 tgggtgtggc tattgtggag gccgtgtctg gtgaacctgg tgaacttggt ggtgggacgg 1320 tgctgatgca ggggagccac agagggttac gaccgacgcg ggtctgacag cacaggccca 1380 ggcaggcgtg gactcgggag ccgagggtgg tcggatggca gcgtgagcgc cagtatcatt 1440 tecageatit ceatetttae caetecagte actetettea aaaagaaaga aetagageaa 1500 aaccaaagtt aaatatetea aegagaaggg acaceteaeg tegetgaeag eteggeaegt 1560 ggctggtccc aggccccaga gatactgcgt agtgaactgg ccgctggaac gcagtcacag 1620 gestetgtgs tgsagessas steesageaa gesasgeaga gesesggest tgagtesaag 1680 aatgeeeagg ggagtgtggg aegggaegge ceeeacaeag getggaeage aageegeeee 1740 cacgcaccga agactcccca cgcgcaggcg gcgcacaccc gggtctccct agggtcctgc 1800 ctcccgagac gctgtcctca cactgcagtt gctgattctt gggtcaaatg gaaggaggag 1860 gaacgacgag ggcagagtgc aaacacgaag tcgcccgggg gcgctgggga cgggggcgca 1920 gtgggcccta ccagttctgg ttgtcccagc catcatcagt gggcacggcc ggcggcactg 1980 cettettggt geceteceeg ceeteceege egtegetgtt getgtteetg ttggtqgagq 2040 cegageeeca caceteecag etgteegage tecteetete ggtggaggtg teegegeacg 2100 tecagetgte getgeteggg gaettgeggg tettggtggg etcageaett ccaaaggtet 2160 eccagaaget etggtetatg ttgetgtttt ggaagtggte cagacegetg ttetgataae 2220 tgtggccctc cgaggggctg tccaaggggc cctctgcttt ccccgaaaaa aaggtggtga 2280 egtecegeca tecettaeta eegaeteeet ggaeettgga egecaaetga gagaeeecae 2340 tggagacate atcaaaaate ttteceteet teacettete etgegeagge ttgaggaegt 2400 tctcgttcag gctgtggccc agctcggacg ccttctgact cgcttgggat ccaaactttg 2460 tagegeeete ettggetgee gaggeaaace ggetggetee agtggtgaag etgeteeage 2520 ccgagtacag ggaggacatg gcgttgttga ggaagtcatc ttctttcttc tqaqqcqqtq 2580 gcgtgttccc aaaccccacg tagcgattcc cctgggcccc ttgataggag ccgaggtcat 2640 cattcageca gtetteaaaa geettgteeg aggaggeggt cacaetetge ggetgqeeag 2700 agacteggtg caccatgaaa ggcagegtee tgeecaegeg teegeecaeg egteeg 2756

```
<210> 4996
<211> 1380
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1098)
<223> similar to gi3098418 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4996
acaagatgcg agccatcctg cgcatagaag tggaggccgt gcggtttcta aagagggagc
                                                                       60
cacacaaget ggacagtete ttgaagegtg tgegeageat gacagaegte etgaecatge
                                                                      120
tgcggagaca tgtcactgat gggctcctga aaggcacgga cgcagcccaa gccgcacagt
                                                                      180
acatggetat ggaaaaggee acageegeag aagteetgaa gagteaggag gaggeageee
                                                                      240
acaccteegg ecagecette cacageacag gtgeecetgg egatgegaag teggaagtgg
                                                                      300
tgcctttgtc cggcatgatg gttcgccacg cgcagagetc ccctgtggtc atccagecct
                                                                      360
eccageacte egtggeeetg etgaaceetg etcagaactt geetcaegtg gecageteee
                                                                      420
cagcogtoco ccaggaagca acctocacto tgcagatgto gcaggotocg cagtoccac
                                                                      480
agatacceat gaatgggtet gecatgeaga gettgtteat tgaagaaate cacagtgtga
                                                                      540
gtgccaagaa cagggcagtg tctatcgaga aagcagaaaa gaaatgggag gaaaaaaggc
                                                                      600
aaaatetgga teactataat gggaaagagt ttgagaaget eetagaagaa geteaggeea
                                                                      660
atateatgaa gteaataeea aatetggaga tgeegeeage caeaggeeea etgeeaaggg
                                                                      720
gagatgcccc agtggacaag gtggaacttt cagaagattc tccaaattcg gaacaggact
                                                                      780
tggaaaaget ggggggaaag tegeeeeete eteeteegee aceteetegt egaagetace
                                                                      840
tgccaggatc gggactcacc accacgaggt caggcgatgt ggtctacacc ggcagaaagg
                                                                      900
agaacatcac cgctaaggca agcagtgaag atgctggacc aagcccacag accagagcta
                                                                      960
caaaatatcc agcagaggag cctgcttcag cctggacccc atccccaccg cctgtcacca
                                                                     1020
cctcctcctc aaaggatgag gaggaagaag aagaagaagg agacaaaata atggcagaac
                                                                     1080
tocaggtatg tggatgaggt gactgacatt ggctccttgc ctcccgcctg ggtctctcca
                                                                     1140
gccatggcac tcacagattt gttagcgaga aggccaggga agcgcatgga ccgggaccat
                                                                     1200
agaagetgtg tettetggee ttageetttg ettteceaag atggegetga acaaggetet
                                                                     1260
caggatgcct ataagatgtg caaggaatga ccatttcaca aaacaactca cgctttccta
                                                                     1320
cetetggetg taaaattgae ttteetttet tteeatetta agagattetg etteatttea
                                                                     1380
```

```
<210> 4997
<211> 1549
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (114)...(1114)
<223> similar to gi5091611 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 4997
                                                                       60
cgacgatttc gtggcggttc aggcgccaga gctggccgat cggcgttggc cgccgacatg
acgecegagg acceagagga aacceageeg ettetgggge eteetggegg caggtetaea
                                                                      120
                                                                      180
tetecgaaat egectaeeca geagteeggg ggttgetegg eteetgtgtg cagetaatgg
tegtegtegg catectectg geetacetgg caggetgggt getggagtgg egetggetgg
                                                                      240
etgtgetggg etgegtgeee eesteestea tgetgettet catgtgette atgeeegaga
                                                                      300
                                                                      360
eccegegett cetgetgaet cageacagge gecaggagge catggeegee etgeggttee
tgtggggctc cgagcagggc tgggaagacc cccccatcgg ggctgagcag agctttcacc
                                                                      420
tggccctgct gcggcagccc ggcatctaca agcccttcat catcggcgtc tccctgatgg
                                                                      480
                                                                      540
cettecagea getgtegggg gteaaegeeg teatgtteta tgeagagaee atetttgaag
aggecaagtt caaggacage ageetggeet eggtegtegt gggtgteate caggtgetgt
                                                                      600
tcacagctgt ggcggctctc atcatggaca gagcagggcg gaggctgctc ctggtcttgt
                                                                      660
caggtgtggt catggtgttc agcacgagtg ccttcggcgc ctacttcaag ctgacccagg
                                                                      720
gtggccetgg caactectcg cacgtggcca teteggegec tgtetetgea cageetgttg
                                                                      780
atgccagegt ggggetggee tggetggeeg tgggeageat gtgcetette ategeegget
                                                                      840
ttgeggtggg etgggggeee ateceetgge teeteatgte agagatette eetetgeatg
                                                                      900
teaagggegt ggegacagge atetgegtee teaceaactg geteatggee tttetegtga
                                                                      960
ccaaggagtt cagcagcctc atggaggtcc tcaggcccta tggagccttc tggcttgcct
                                                                     1020
cegetttetg catetteagt gteettttea etttgttetg tgteeetgaa aetaaaggaa
                                                                     1080
agactetgga acaaatcaca geceattttg aggggegatg acagecacte actaggggat
                                                                     1140
ggagcaagcc tgtgactcca agctgggccc aagcccagag cccctgcctg ccccagggga
                                                                     1200
gccagaatcc agccccttgg agccttggtc tgcagggtcc ctccttcctg tcatgctccc
                                                                     1260
tecageceat gaccegggge taggaggete actgeeteet gttecagete etgetgetge
                                                                     1320
tetgaggaet caggaacace ttegagettt geagacetge ggteageeet eeatgegeaa
                                                                     1380
gactaaagca gcggaagagg aggtgggcct ctaggatctt tgtcttctgg ctggaggtgc
                                                                     1440
ttttggaggt tgggtgetgg geatteagte geteetetea egeggetgee ttategggaa
                                                                     1500
ggaaatttgt ttgccaaata aagactgaca cagaaaatca aaaaaaaaa
                                                                     1549
```

```
<210> 4998
<211> 2938
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(947)
<223> similar to gi5912247 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4998
acgcgtccgc cggagcgggc catggacgcg ctcaagtcgg cggggcgggc gctgatccgg 60
agccccagct tggccaagca gagctgggg ggcggtggc ggcaccgcaa gctgcctgag 120
aactggacag acacgcgga gacgctgctg gaggggatgc tgttcagcct caagtacctg 180
ggcatgacgc tagtggagca gcccaagggt gaggagctgt cggccgccgc catcaagagg 240
atcgtggcta cagctaaggc cagtgggaag aagctgcaga aggtgactct gaaggtgtcg 300
ccacggggaa ttatcctgac agacacctc accaaccagc tcattgagaa cgtgtccata
```

```
420
tacaggatet ectattgeae ageagaeaag atgeaegaea aggtgtttge atacategee
cagagecage acaaccagag cetegagtge caegeettee tetgeaccaa geggaagatg
                                                                     480
                                                                     540
gcacaggetg ttaccetcac cgtageccag geetteaaag tegeetttga gttttggeag
                                                                     600
ggggcccgcc aagactgcac ecceecttg aagagettgg tegecactgg gaacetgetg
                                                                     660
gacttagagg agacggctaa ggccccgctg tccacggtca gcgccaacac caccaacatg
                                                                     720
gacgaggtgc cgcggccaca agccttgagt ggcagcagtg ttgtctggga gctggatgat
                                                                     780
ggcctggatg aagcgttttc gaggcttgcc cagtctcgga caaaccctca ggtcctggac
                                                                     840.
actggcctga cagcccagga catgcattac gcccagtgcc tctcgcctgt cgactggač
                                                                     900
                                                                     960
aagcetgaca geageggeae agageaggat gacetettea gettetgagg geeeggggee
ageoggacae aageggeeet gacaegtgat ggaccaaage cacetgetge gggggageea
                                                                    1020
gttetgggge cegeetgeea ceteteecag eceteageat tgteageetg aagateagag
                                                                    1080
ctgcagccag tcaggcaggg gagagatttt tcttttaagc cctgctcttt ctctgagaac
                                                                    1140
caaaagatgc cttgaatatt tattcagtga cttctggctt atgctcagaa gccagtctgc
                                                                    1200
gtcaggcacg tetectgetg egtgacatgt geagtgetgt aateggetee egettgetet
                                                                    1260
cctggagcaa gctctgccct ggctgtgggt atcaggactg tgaccaaagc atttctagtc
                                                                    1320
cettetetet ttetaaggae ceaaatttee etgggggeat eetgetteet gaaagetgtt
                                                                    1380
ggatttcagt gatttttccc cccaccccc agcacaggag agcacccaca gccgcagaag
                                                                    1440
gggaatgtgt ceteetgete tgetteetea gggeeecage aggeggggg tttgageect
                                                                    1500
gggaccccag gcttctctag agacttaagg gggcagctcc tgaaccaaag acgatacagc
                                                                    1560
ttggcacttt aaagcattaa cagcaggtgt gaccctgagg geteeteeat ggtgctgcat
                                                                    1620
tgagtccagc tttccttctg cccttcctcc aggagaaggg gcccaaggtc cccgtggatg
                                                                    1680
gtetecacet gtgettggaa ecagtgtaae tggetgetee etgeteccag ggaetgacae
                                                                    1740
ggggatcatc tetgtgaceg cecteegteg ggeeeetgee tgeettetee ceteeaegea
                                                                    1800
aggetgtget etteetetgg tttetgtgtg teegtttgag tgtetgegee eegeeteeee
                                                                    1860
atacttcctg ggatgatgtg tgaaacctga cacctagatt tatttggaaa tattctatga
                                                                    1920
ccactttaca gatgaggaaa ctgaggcctc aagcgtggag gggtagagtg aagagtagaa
                                                                    1980
cccaggtetg atgccaaage tgetttette tetgeeteet ceteaegeaa eteaeacete
                                                                    2040
cttttcttct agctttgttg tcctcccagg aaccaaaaaa ccccagctat tttctgacca
                                                                    2100
aaatgtgttt cataacaaac catctggtgc ctttccacac agaactggca ggaqcctcgt
                                                                    2160
greetgetag etgretetet tgrtgattte egrgaaaatg caagtgrttg aagtergete
                                                                    2220
attocgaggg tgaaacaaaa tocaaccotg toagaatcat gotgttotot ttgotgacac
                                                                    2280
tgtgaccctg ggtcgggaca gaccagcagc aatctgtctt tagaatctct ttccttcctc
                                                                    2340
cccttttgcc cccgtggggc tcccggcatc ctgaaagcca gcaaagcctc cagcatcttt
                                                                    2400
tecateetga ggtgeeteee agtggeetgg ettgteggag caagttteat cageectagg
                                                                    2460
gaaaacacgg cccctcctgg gaacctcctt acctggagta accggacacc ttagacggag
                                                                    2520
gtgcctgagg gtggggtggg atttgcaggg tcattatcag aacatgagga taacttcctt
                                                                    2580
geceetgete tgtagecace teettggeac eggéététat ttgteataag geggegtggg
                                                                    2640
cgaggcctga cacaggccag ccttggcacg agggggcca ggggttctga gaagcgctgc
                                                                    2700
cetgtgagag ccaegtgaga gccatgetgg cettegtete catetetggt tgaegggetg
                                                                    2760
tecgtgtgcc teetgtgtgt etgeagaeae acaggageea egetggeett egteteeate
                                                                    2820
tetggttgae gggetgteeg tgtgeeteet gtgtgtetge agacaagtet tgetgtgett
                                                                    2880
tatttgtgaa actttaatga ggaaaaaaca aataataaat gttctcgttt tgaaactc
                                                                    2938
```

```
<210> 4999
<211> 2910
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(2858)
<223> similar to gi2564330 in the genepept database release 114,
```

<400> 4999 gcagtatctg ggagagacgc agttcgcacc gggccagtgg gctggcgtgg tgctggacga 60 cccggtgggc aagaatgatg gcgcggtggg cggcgttgcgc tacttcgagt gcccggccct 120 ccagggtatc ttcacgcggc cctccaagct gacccggcag cccacggccg agggctcggg 180 gagtgatgcc cacteogtgg agtegetgac tgcccagaac ctgtcattgc attegggcac 240 ggccacgccc ccgctgacca gccgcgtcat ccccctgcgg gagagcgtcc tcaacagctc 300 cgtgaagact ggcaacgagt cgggatccaa cctctcagac agcggctctg tgaagcgggg 360 cgaaaaggac ctgcgcctgg gggaccgcgt gctggttggc gggacgaaga ctggcgtggt 420 geggtaegtg ggggagaeag aetttgeeaa gggegagtgg tgtggegtgg agetggaega 480 gccccttggg aaaaatgatg gggcggtggc gggcaccagg tacttccagt gcccacccaa 540 gtttggtctc ttcgcgccca tccacaaagt gatccgtatc ggcttcccat ctaccagccc 600 agccaaggcc aagaagacca agcgtatggc catgggtgtg tcagcactga cccacagtcc 660 cagcagttee tecateaget cegteagete tgtggcetee teegtggggg gteggeecag 720 cegeagtgge etgeteaegg agacetette aegetaegee egeaagatet egggeaecae 780 ggccttgcag gaggcactga aggagaagca gcagcacatt gagcagctgc tggctgaacg 840 agacctggaa cgggctgagg tggccaaggc cacaagccac atctgcgagg tggagaagga 900 gattgecetg etcaaggeac ageatgagea gtatgttgea gaageegagg agaagetgea 960 gcgagcccgg ctgctcgtgg agagcgtgcg gaaagagaag gtggacctgt ccaaccagct 1020 ggaggaggag aggaggaagg tggaggatct gcagttccgc gtggaggagg agtccatcac 1080 caagggagac ctggagaccc agacgcagct ggagcacgcg cgcattgggg agctggaaca 1140 gagectgeta etggagaagg egeaggeega geggetgete egagaattag eggacaacag 1200 getgaceaca gtggeegaga agtegegegt getgeagetg gaggaggage teaccetgeg 1260 ccgaggtgaa atcgaggagc tccagcagtg cctgttgcac tcgggtcccc cacctccgga 1320 ccacccagac gccgccgaga tcctgcggct acgggagcgg ctgctctcgg ccagcaagga 1380 acaccagagg gagagtgggg tgctgcggga taaatacgag aaggccctga aggcctacca 1440 ggcggaggtg gacaagctcc gcgcggccaa cgagaagtac gcacaggagg tggcgggcct 1500 gaaggacaag gttcagcagg ccaccagcga gaacatgggg ctaatggaca actggaaatc 1560 caagetggac tegetggeet eggaceacea gaagteeetg gaggacetea aageeaceet 1620 gaactcgggc ccaggcgccc agcagaagga gatcggcgag ctgaaggcag tgatggaggg 1680 catcaagatg gagcaccagc tggagctggg taacttgcag gccaagcatg acctggagac 1740 cgccatgcac gtgaaggaga aggaggcct gcgagagaag ctgcaggagg cccaggagga 1800 gctggctggg ctgcagcggc actggcgggc ccagctggag gtgcaagcca gccagcaccg 1860 gctggagctg caggaggccc aggaccagcg ccgggatgcc gagctgcgtg tgcacgagct 1920 ggaaaaactg gacgtggagt accggggcca ggcgcaggct atcgagttcc tcaaggagca 1980 gatetegetg geegagaaga agatgttgga etaegagegg etgeageggg cagaageeca 2040 gggcaaacag gaggtcgaga gtttgcggga gaagctcctg gtggctgaga acagactcca 2100 ggcggtcgag gccctgtgct cctcccagca cacccacatg attgagtcga atgacatttc 2160 agaggagacg atcaggacga aggaaactgt ggagggcctg caggacaagc tgaacaagag 2220 ggacaaagag gtgacagcct tgacctccca gaccgagatg ctcagggccc aagtaagtgc 2280 gctggagagc aagtgtaagt caggcgagaa gaaggtggac gccctcctga aggagaagcg 2340 gcgcctggag gcagagctgg agaccgtgtc ccggaagacc catgacgcct cgggccagct 2400 2460 gctgctggag gccaatcgtc actccccagg gccggagagg gacctgagcc gtgaggtaca 2520 caaggctgag tggcggatca aggagcagaa actcaaggat gacatccggg gcctgcgtga 2580 aaagctgacc gggctggaca aagagaaatc cctgtcggat cagaggcgct actccctcat 2640 cgacccgtcc tcggcgcccg agcttctgcg gctgcagcac cagctgatga gcacggagga 2700 cgccctgcgg gatgcgctgg accaggctca gcaggtggag aagctgatgg aggccatgag 2760 gagetgeect gacaaggeec agaceategg caatteeggt tetgeaaaeg geatecacea 2820 gcaggacaaa gctcagaaac aagaggacaa gcactgatcc tgaggggata ctgtggagca 2880 gcccagtcca caccagagcc ccactgtatt 2910

```
<210> 5000
<211> 1448
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (52) ... (462)
<223> similar to gi172168 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5000
tttegtetge tggeggeegg gagegeeggt aeggggeget aageeggagg eteegggaeg
                                                                        60
tggatacaga tgaaaagaag caaagaattg ataactaaaa atcatagtca agaggaaaca
                                                                       120
agtattette gttgttggaa atgtagaaaa tgtatagcaa getetggttg ttttatggag
                                                                       180
tatettgaga ateaagtgat taaggataaa gatgatteag ttgatgetea aaatatttgt
                                                                       240
catgtgtggc acatgaatgt agaagccctt ccagaatgga täagctgcct aatccaaaaa
                                                                       300
gcccagtgga cagttggaaa actgaattgt cctttctgtg gggcccgttt agggggcttt
                                                                       360
aattttgtca gcactccaaa atgttcctgt ggccagcttg cagctgtaca tctctccaag
                                                                       420
ageeggaetg attateagee aacacaggea ggeagaetaa tgagaeeate agtgaaatae
                                                                       480
ttgtcacatc ctatagttca gtcaggttgt gacaaggaag ctctgctgac aggtggtggc
                                                                       540
tetgaaaaca gaaateacag gettttaaae atggeeegaa ataataatga eeetggaaga
                                                                       600
ttaacagaag cactctgcct ggaggtgcga ccaacatatt ttgagatgaa gaacgaaaaa
                                                                       660
ctgctgtcca aagcatcaga accaaaatac cagctttttg ttccccagct tgtgactggc
                                                                       720
agatgcgcta caagagcttt tcatagaaaa tcacatagtt tggatctgaa catcagtgag
                                                                       780
aaactgactt tattacccac tttatatgaa atacatagta agactactgc ctattccaqa
                                                                       840
ctaaatgaaa cacageetat tgacetttea ggettgeett tacaatetag taaaaatage
                                                                       900
tatteettte agaateeate cagttttgat ectagtatge tgetgeaaag attttcagtg
                                                                       960
gcccccatg agacccagac acaaagagga ggagaatttc agtgtggtct agaagctgct
                                                                      1020
tragigiatt rigarcatar taatartaar aatrigarti treigatgga cetgeretea
                                                                      1080
gctggcagga gcatgccgga ggcctcagac caggaagagc acctctcccc tctggacttc
                                                                      1140
ctgcactcag ccaatttitc attgggcagc attaatcaga ggcttaataa gagagaaagg
                                                                      1200
agcaagttga agaatctaag aaggaaacaa cgaaggcgtg aaagatggct acagaagcag
                                                                      1260
ggtaaatact caggagtigg attigctiggat čatatigactt tigaataatiga gatigagtača
                                                                      1320
gatgaagaca atgaatatgc agaagaaaag gatagctaca tctgtgcagt gtgtctggac
                                                                      1380
gtttatttca accettatat gtgttaccet tgccatcaca tettetgtga gecetgetta
                                                                      1440
cggactct
                                                                      1448
```

```
<210> 5001
<211> 1238
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (180)...(464)
<223> similar to gi2911858 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5001
cggccagaaa attgaaagcg ttggacgcc taccggaccg caattcccga tgacgatttc
                                                                       60
                                                                      120
gtetgtaacg cagaagcgaa atgtagcgag ccggttgtcg cggctggacg ctcgccttgg
ctgggggtgt gggggggcac gccgggggcc aaggaggact gtcgaggagg agtgatgtga
                                                                      180
attotogete agecegggte etetteetee tegtggteee aggacacetg gtgtteetet
                                                                      240
acaccatcag ctgtatgcag ggcgggcaca ccaccctcac actcatcttc atcatcttct
                                                                      300
atatgacage tgeactgete caggtgetga tteteetgta categeagae tggatggtge
                                                                      360
actggatgtg gggccggggc ctggacccgg acaacttete cateccatae ttgactgete
                                                                      420
tgggggacct gcttggcact gggctcctag cactcagctt ccatgttctc tggctcatag
                                                                      480
gggacegaga caeggatgte ggggaetage ttggteacte aacattttee ceatecetet
                                                                      540
gcactttcta tttgaaattt ttcttttgtt cccctgtccc tcctccaccc cacactccca
                                                                      600
cctctttcta ggacttcact ttgataccaa attctcatta ttttcaatgg gaatttttat
                                                                      660
acattgagoc aagtttgtat agcaagaatt tgggaaacac agatggcctg agataagcag
                                                                      720
tacaagtagg tttttgagac aatcaccaag tgcagtttca tggtgggtgc ctccaggtga
                                                                      780
tgtggactgg agcaggggag ttttgtctgg aatctgggga catggggttt ggctttagca
                                                                      840
acctgtettg gecetaatga gaaaccettt gtaagtggge tetggatttt tggttttgtt
                                                                      900
ttcttttat ctgttttgtt ttatttttgg ttttggttga acagagggac agaagaataa
                                                                      960
gtaacactee caaacacaga catacttttg tagaagtgga ccaacttcaa agetetggac
                                                                     1020
aggagacacc tgctccaggc ccctgtgatc ccagttctgt tctcttgccc tctggaccta
                                                                     1080
agegtteeca etegeagaaa gagtaaggtg gaetgaettt teaatttgtg cacatgeete
                                                                     1140
tigticaatg geetggicaa cateaacaae eesteestet gateatities agitgatigt
                                                                     1200
catatccaga aaaaaatgga acagtgcact cttctccg
                                                                     1238
```

```
<210> 5002
<211> 2610
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(769)
<223> similar to gi868189 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5002
gtggaatggg acaaagacca tggggtcctg gagtcccacc tggcggagaa ggggagagc
                                                                       60
atggagetat cegacetgat tgttttcaat gggaaactet acteegtgga tgaceggaeg
                                                                      120
ggggtcgtct accagatcga aggcagcaaa gccgtgccct gggtgattct gtccgacggc
                                                                      180
gacggcaccg tggagaaagg cttcaaggcc gaatggctgg cagtgaagga cgagcgtctg
                                                                      240
tacgtgggcg gcctgggcaa ggagtggacg accactacgg gtgatgtggt gaacgagaac
                                                                      300
ccggagtggg tgaaggtggt gggctacaag ggcagcgtgg accacgagaa ctgggtqtcc
                                                                      360
aactacaacg ccctgcgggc tgctgccggc atccagccgc caggctacct catccatgag
                                                                      420
tetgeetget ggagtgacae getgeagege tggttettee tgeegegeeg egeeageeag
                                                                      480
gagegetaca gegagaagga egaegagege aagggegeea acetgetget gagegeetee
                                                                      540
cctgacttcg gcgacatcgc tgtgagccac gtcggggcgg tggtccccac tcacggcttc
                                                                      600
```

```
660
tegteettea aqtteateee caacacegae gaccagatea ttgtggeeet caaateegag
                                                                      720
gaggacagcg gcagagtcgc'ctcctacatc atggccttca cgctggacgg gcgcttcctg
                                                                      780
ttgccggaga ccaagatcgg aagcgtgaaa tacgaaggca tcgagttcat ttaactcaaa
                                                                      840
acggaaacac tgagcaaggc catcaggact cagcttttat aaaaacaaga ggagtgcact
tttgttttgt tttgttcttt ttggaactgt gcctgggttg gaggtctgga cagggagccc
                                                                      900
agteceggge cecatagtgg tgegggeact ggacecegg geceeaegga ggeegeggte
                                                                      960
tgaactgctt tccatgctgc catctggtgg tgatttcggt cacttcaggc attgactcaa
                                                                     1020
ggcctgccta actggctggg tcgtttcttc catccgacct cgtttcttt ctttcctatg
                                                                     1080
ttettttgtt cagtgaatat cectagaget cetaceatat gteaggeest atgesteace
                                                                     1140
                                                                     1200
ctgagaacgc agtgagcatg aggtggacct gtttgctggg aaccccaggt caccccttt
tetteetaet etgtgeetgg ageateatgt ceaeceetge agateettgg aaaagaaaat
                                                                     1260
gtttatgttg cagggtattg catggtcacg agtgagggca ggcccctggg gacacatctg
                                                                     1320
cccacagctg cacaggccag ggcgcaggca catctgttgg ttctcaggcc tcagataaaa
                                                                     1380
ccatctccgc atcatatggc cagtgaccgc tttctccctt caagaaaatt ctgtggctgt
                                                                     1440
gcagtacttt gaagttttaa ttattaacct gctttaatta aagcagtttc ctttcttata
                                                                     1500
aagtggaatc accaaatctt atcacacaga gcacagtcct gtagttaccc agcccgctcc
                                                                     1560
                                                                     1620
agcagtgcgg gagattgtaa ggaagcggtg gcggctggtg aagcaagtct cacatgtcgg
cgttcttggc caatggatac aaagataaag aaaatgttgc ctttttctag gaactgtcag
                                                                     1680
aaatcctcat gcctttcaag acttctgtga atgacttgaa ttttttattc cctgcctagg
                                                                     1740
gtotgtgaac gaggootgto tottocotgg ggtttottto catggoottt atttotcotc
                                                                     1800
ttccagtggg agttttgcag gctcttctct gtggaaactt cacgagcgtt ggctgggcct
                                                                     1860
cggcttcgct ggagtgtact ccagggtgaa ggcagagtgg gatttgagac ccaggttagg
                                                                     1920
cacgacccag gctgagaagg gacgtttcca tcattcacag tgccctcccc acagcactac
                                                                     1980
ctcacccga ccccaccct cactcctacc ccacccggg atcgtcaggg gtgccacggt
                                                                     2040
gggccggagg gtgccggctc tggctgtccc tgtgccggtc cctcacaaac ctctcccct
                                                                     2100
ttgaaactca agcacagetg egaggagggc agcgaggagg gaccetete tcatggttgt
                                                                     2160
ctctttcccc cgctatgtca taggtagtgg aggaagcgaa ggaagtgaac gctgaatgtg
                                                                     2220
acgcatttct gaagagetca getgtcaccg ggcatagect ggaageeeca agtetgttet
                                                                     2280
gactttgcct ggctgtctcc ttgacccgcc tcctagatca ttgtccttga tgtccaggct,
                                                                     2340
gggtcattta aaatagagat gcaatcagga aggttggggg acttgggact gtggctgaat
                                                                     2400
tgagacettg etgatgtatt catgteagea cetgagteae ageceaggtg eeeggaagea
                                                                     2460
gestettege ataaggeagt gattttgega attactttaa ageteacett tittetteee
                                                                     2520
etetetgtte getgetgtea geataatgat tgtgtteett eeetatggga teeatetgtt
                                                                     2580
ttgtaaacaa taaagcgtct gagggagtgt
                                                                     2610
```

```
<210> 5003
<211> 1415
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1161)...(709)
<223> similar to gi746495 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5003
ttttttttt ttcacactgt cacaatttat tgaaatttta taaaaactca ggccaagtgg 60
aagaataagg tacaactcaa gagtacaaag acaactccgt ttccgttcag tacttttctc 120
ctcagcactg gtggtaagaa agccccttgc tcctagtag ccaggcagca tggacttaca 180
```

```
gtcttaaaat gaggctttat gtatttcagg ctggaggcag gttgcctttt ctcctgagga
                                                                      240
atctcaggca gggtaaaagt tacttaccac tcagtacctc tgtgccagaa gaaaagctca
                                                                      300
                                                                      360
atttattcaa tccttagaaa agttactatc gtcccctggt cagacactaa ggtgtcttga
taaggtccag agacaaccac atagtcctta ttctaattcg tagtgaaaag gctgcaggca
                                                                      420
tatggtgctc ctacgatggg cctgaccctt tcctaagcac atctcatttc cacatccttt
                                                                      480
                                                                      540
qccttctctt tcccccaaca tttccagcca gcatagaacc caatttctgg gaaattgaga
ggagaaacag tattatgaac acagactcct ttcaaattgg aacaggagcc aaaccaaata
                                                                      600
aataagagaa ttgtgtaggg aagtggggta gaagggaggt cagggagcaa tcccttgcct
                                                                      660
caagtotggt gcacctcatg gaacatcagt tcacggggga tggctgtttc tggaccaaac
                                                                      720
                                                                      780
ttggtggctg cccgacgctc aaaggcagca acattctgtt tgacaacctc atcaaaaaac
atggtggcca gctgggagtg cagcagagaa cgaaattcaa aggaaatcga aaagtccaca
                                                                      840
                                                                      900
gtgcaggttc gaggataggc aggaatacca gggctgaatc gccaaatagt ctctaagtgg
ttgaagagct tgccatcagt acaaacagcc ttgaccatgt gaggtttgac catggaaact
                                                                      960
gcagaggtgt aacgttccat gacaggtgga aagccaacct ccagctgggc tttcaaatga
                                                                     1020
                                                                     1080
cccttacggc tggataccac cagagacttc ttaccccagg gcacaaactc acgatactcc
tggacgttgg acaccacctc atacatctcc tgcattgagt accccatgat tctacgctcc
                                                                     1140
gagtaagcct ttcgcttgtt ggtgaaggga gcagcaaatc ccatgaagga acggctcgaa
                                                                     1200
                                                                     1260
ggtaagccag ceteagcege caagatetgg geagceegag geaagaggag getgeaggag
                                                                     1320
gtcagaaacc ccgagaactt cccttctcgt acaacttgca aaagcattat ccaaagctct
acgttagete ccagggeatg attgetgeca gteccegeeg egeetgeate ccagtatage
                                                                     1380
accettecae egeggaaeee eggggttege agega
                                                                     1415
```

```
<210> 5004
<211> 988
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (769)...(231)
<223> similar to gil001126 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5004
ttttttttt tttatttggg ttttttttct cttaaaaaga tttattatca aaaagtttgc
                                                                       60
tecetttaaa taetgageea atteateaat geageteeat tetttttagg attattaggg
                                                                      120
                                                                      180
cccaaataat ttcagactaa aacaagaaat aaaaaactgg actataggtt cagtaacata
ttcacagaca tgtcagtgtg cactcaggaa cactggtttc atttcttgat tggaatgctt
                                                                      240
atcaccataa aatcttctgc tagagtcact tcttggagat ctaacactga ttcagcttgc
                                                                      300
tttttttagtt etgeaatgee atetgtttet eettetetgg eeaaggeaac tggtttgtae
                                                                      360
ctctgactga agtgagtcag aaccagcctc tttgcacggc acaactttgc aaatgttgct
                                                                      420
gccatctgtg gtgtgctgtg gccatgctcc tttgctttgt ccatctgggc atcatccagg
                                                                      480
gttgcttcgt ggatcaacag gtctgcttca aagcacagtt ttactcctcc atcacccaca
                                                                      540
accccagage agteacccaa tatgcagatt tttettecaa caataggett ttttaagaca
                                                                      600
tettggggag aaattgtaac eccattttee agaacaacag aaatteeatt ttteagette
                                                                      660
ccataggcag gacctggtgg aacaccaagg tctttaagtt tctgtgcatt gagtttacct
                                                                      720
gggcgtttct tttccacgac tgaaaaccca aatgagggaa ttctgcttta agttggcttt
                                                                      780
teataagetg tgtetgtgtt ceeteeceac agteaaagag ceageacteg cetteacace
                                                                      840
                                                                      900
gaaggaccac agcagaggca ccccgggttg gagatgggta tgctgcaccc gtccccagga
atgtcacate catagacate ttecacecet eteceogagg ecegegecag gageogaggg
                                                                      960
```

```
<210> 5005
<211> 782
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)...(423)
<223> similar to gi5706448 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5005 cccacgcgtc cggaccttgg tgatttaagg cggcaggtta aactcttaga agagaagaat 60 accatgtata tgcagaatac tgtcagtcta gaggaagagt taagaaaggc caacgcagcg 120 cgaagtcaac ttgaaaccta caagagacag gtagtagaac tacaaaacag attatccgaa 180 gaatcaaaga aagcagataa actagatttt gaatataagc ggctaaaaga aaaagttgac 240 agtetteaaa aagaaaagga caggetgaga acagaaaggg attetetgaa ggaaaceatt 300 gaagagette gttgtgtaca ageteaagaa gggeagetea caacacaagg gttaatgeet 360 cttggaagtc aggagtcttc agacagtcta gctgcagaga ttgttacacc tgaaatcagg 420 taaggagatt gtggtgttca cacttacact gcacagtatt cttggagaaa acgtacttct 480 ctacaatatg aagaagataa tttccttatt ctttctcacc gacactttca acatgaactc 540 agtgttaaat ttttatgttt tcaacatgtt aaaagctttc ttccactggc ctacggaaaa 600 ttgatttgct cacttcaata agacaatctt tcacacatat aaagccaatt gttatgtcca 660 aagettgagt atceteagea gacattaage aatgaataca tttggeetgt agacaatagt 720 tatgettage tataageatg caaaattatt agttattaag atttatetge taaceagetg 780 782

```
<210> 5006
<211> 574
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(215)
<223> similar to gi435774 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5006
caagaaagcg getteagetg taaaggacet ggeeagaatg tggetgtgae cagggeacae 60
cctgaetece aagggaggeg geggeggeet gageggggg ceegaggagg ceaggtgttt 120
```

```
tacaacagcg agtatgggga gctgtcggag ccaagcgagg aggaccactg ctccccgtct
                                                                      180
gcccgcgtga ctttcttcac agacaacagc tactaagcag catcggacaa gacccccagc
                                                                      240
acttgggggt tcaggcccgg cagggcgggc agagggctgg aggcccaggc tgggaactca
                                                                      300
tetggttgaa etetggtgge acaggagtgt cetetteeet etetgeagae tteecageta
                                                                      360
ggaagagcag gactccaggc ccaaggctcc cggaattccg tcaccacgac tggccagggc
                                                                      420
cacgetecag etgeceegge cecteceect gagatteaga tagaatgtga eetetaggea
                                                                      480
tgatttgcta ggggtgggag cagcatcttt ctgtcaccat tgtgtgaaca gcagggtcag
                                                                      540
atgttcctag tgatatcacg ggaagccttg tttc
                                                                      574
```

```
<210> 5007
<211> 1179
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1180)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3)...(387)
<223> similar to gi4586838 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5007
acgtaattgt gcatgcgcgg cccatccgca cgcgggctag caagtactac atccccgagg
                                                                       60
degtgtaegg detgedeged tateeggeet aegegggegg eggtggettt gtgettteeg
                                                                      120
gggccacget gcaccgcctg gctggcgcct gtgcgcaggt cgagctcttc cccatcgacg
                                                                      180
acgtetttet gggeatgtgt etgeagegee tgeggeteae geeegageet eaccetgeet
                                                                      240
tecgeacett tggcatecee cageetteag eegegeegea tttgageace ttegaceeet
                                                                      300
gettttaccg tgagetggtt gtagtgcacg ggetetegge egetgacate tggettatgt
                                                                      360
ggegeetget geaegggeeg eatgggeeag eetgtgegea tecadageet gtegetgeag
                                                                      420
gccccttcca atgggactcc tagctcccca ctacagcccc aagctcctaa ctcagaccca
                                                                      480
gaatggagee ggttteeeag attattgeeg tgtatgtggt tetteeetga teaceaggtg
                                                                      540
cctgtctcca caggatccca ggggatgggg gttaagcttg gctcctggcg gtccaccctg
                                                                      600
ctggaaccag ttgaaacccg tgtaatggtg accetttgag cgagccaagg ctgggtggta
                                                                      660
gatgaccate tettgtecaa caggteccag agcagtggat atgtetggte etectagtag
                                                                      720
cacagaggtg tgttctggtg tggtggcagg gacttaggga atcctaccac tctgctggat
                                                                      780
ttggaaccec ctaggetgac geggaegtat geagaggete teaaggeeag geeceaeagg
                                                                      840
gaggtggagg ggctccggcc gccacagcct gaattcatga acctggcagg cactttgcca
                                                                      900
tagctcatct gaaaacagat attatgcttc ccacaacctc tcctgggccc aggtgtggct
                                                                      960
gagcaccagg gatggagcca cacataaggg acaaatgagt gcacggtcct acctagtctt
                                                                     1020
ttcctcacct tcctgaactt cagacaacna ttggccantc tcccactgga aggctgtatc
                                                                     1080
ccctcaagan ggagccaagg aatgtttttc ccctggagat gccacactaa ttaattttcc
                                                                     1140
ccatatggtt taancaaccc cttgggtgaa aaaanccaa
                                                                     1179
```

```
<210> 5008
<211> 2872
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2873)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (38)...(1809)
<223> similar to gi3881530 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5008
tttcgtgcct cgggtgacac ccagatetet etetetecag ggccccaaag gtgagagegt
                                                                       60
gggctccatc acacagcccc tgcccagcag ctacctgatc ttcagggccg cctccgagtc
                                                                      120
agatggtege tgetggetgg aegecetgga getggeeetg egetgeteta geetaetgag
                                                                      180
actgggcacc tgcaagccgg gccgagacgg ggagccaggg acctcgccag acgcatcacc
                                                                      240
ctcatcgctc tgtgggctgc cagcctcagc caccgtccac ccagaccaag acctgttccc
                                                                      300
actgaacggg tettecetgg agaacgatge atteteagae aagteggaga gagagaacee
                                                                      360
tgaggagtca gataccgaga cccaggacca tagccggaag acggagagtg gcagcgacca
                                                                      420
gtcagagacc cctggggccc cggtgcggag agggaccacc tatgtggagc aggtccagga
                                                                      480
ggagctgggg gagctgggcg aggcgtccca ggtggagaca gtgtcagagg agaacaagag
                                                                      540
tetgatgtgg accetgetga ageagetacg gecaggeatg gacetgteee gegtggtget
                                                                      600
acccacgttc gtactggagc cgcgctcctt cctgaacaag ctctccgact actactacca
                                                                      660
egeagacetg etetecaggg etgeggtgga ggaggatgee tacageegca tgaagetggt
                                                                      720
gctgcggtgg tacctgtctg gcttctacaa gaagcccaag ggaatcaaga agccgtacaa
                                                                      780
ccccatcctg ggggagacct tccgctgctg ctggttccac ccgcagactg acagccgcac
                                                                      840
attotacata gcagagcagg tgtcccacca cccgcccgtg tctgccttcc acqtcaqcaa
                                                                      900
ccggaaggac ggcttctgca tcagtggcag catcacagcc aagtccaggt tttatgggaa
                                                                      960
etegetgteg gegetgetgg aeggeaaage caegeteaee tteetgaaee gageegagga
                                                                     1020
ttacaccett accatgeeet acgeecactg caaaggaate etgtatggea egatgaceet
                                                                     1080
ggagctgggt gggaaggtca ccatcgagtg tgcgaagaac aacttccagg cccagctgga
                                                                     1140
attcaaactc aagcccttct tcgggggtag caccagcatc aaccagatct cgggaaagat
                                                                     1200
cacgtcggga gaggaagtcc tggcgagcct cagtggccac tgggacaggg acgtgtttat
                                                                     1260
caaggaggaa gggagcggaa gcagtgcgct tttctggacc ccgagcgggg aggtccgcag
                                                                     1320
acagaggetg aggeageaea eggtgeeget ggaggageag aeggagetgg agteegagag
                                                                     1380
gctctggcag cacgtcacca gggccatcag caagggcgac cagcacaggg ccacacagga
                                                                     1440
gaagtttgca ctggaggagg cacagcggca gcgggcccgt gagcggcagg agagcctcat
                                                                     1500
gccctggaag ccgcagctgt tccacctgga ccccatcacc caggagtggc actaccgata
                                                                     1560
cgaggaccac agcccctggg accccctgaa ggacatcgcc cagtttgagc aagacgggat
                                                                     1620
cctgcggacc ttgcagcagg aggccgtggc ccgccagacc accttcctgg gcagcccagg
                                                                     1680
gcccaggcac gagaggtetg gcccagacca gcggettege aaggccageg accageeete
                                                                     1740
cggccacage caggccacgg agagcagegg atccacgeet gagteetgee cagagetete
                                                                     1800
agacgaggag caggatggtg actttgtccc tggcggtgag agcccatgcc ctcggtgcag
                                                                     1860
gaaggaggeg eggeggetge aggeeetgea egaggeeate etetecatee gagaggeeea
                                                                     1920
gcaggagetg cacaggcace teteggeeat getgagetee aeggeaeggg cageaeagge
                                                                     1980
accgaececa ggeeteetge agageceeeg atcetggtte etgetetgeg tgtteetgge
                                                                     2040
gtgtcagctg ttcattaacc acatectcaa ataggagece tgggggnaga geteetggee
                                                                     2100
tgtgggggcc ctggacagtc acaccccagc agcagtgagt gggcaggttt ggaggagcag
                                                                     2160
```

```
ccagggagcc ccgagtggcc caggagtccc cccacacac gatgcatagg cctgccttcc
                                                               2220
ggagaccetg tecacattge egggaceace etggtgggge caetggtggg tgecagggae
                                                               2280
aggttagggc cactetgggg aaggcatttt ggttttttat tecaegetgt getgtttgga
                                                               2340
2400
tggtggggc acacgcaggt ggaggtggtt gtgggtgcag gtgtgtgcag gggtgtgggg
                                                               2460
ggcgcagggg tgtggcttag ctggccccgc acccaggccg gggaggctca agttcgccac
                                                               2520
tttactcaga ccgatgcaca gtcttcccat tttacacttt tttaataaac ataattgcaa
                                                               2580
tattttaggt gggctgcgag ctgcagtcag ccttcacgtc tggcctcagt ccccgtgtca
                                                               2640
gtgccgctct gcgtgtgcgt gtgcacgtgt gtgagcctct acacatatat atacgtacag
                                                               2700
agcettaaac cacategtgg eggtgeegte tgagetgtag egggtggett tgttteeagt
                                                               2760
ttttgtaccc gtgtccttgt ctcccctcct cccccatctg gggatgtgtc tgtgttccac
                                                               2820
accttgaaat aaacagacac atacgtgttc tcttcttgcg ggaaaaaaaa aa
                                                               2872
```

```
<210> 5009
<211> 1731
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (62)...(419)
<223> similar to gi3986746 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5009
ggatttcgtg ccaagcttca ggaggccaag cggcaacacc agtcagactg tgtggctttt
                                                                       60
gagggetget accetggaaa aggaagtgge egggttgegg gagaagatee accaettgga
                                                                      120
tgacatgctc aagagccagc agcggaaagt ccggcaaatg atagagcagc tccagaattc
                                                                      180
aaaagctgtg atccagtcaa aggacgccac catccaggag ctcaaggaga aaatcgccta
                                                                      240
tctggaggca gagaatttag agatgcatga ccggatggaa cacctgatag aaaaacaaat
                                                                      300
cagtcatggc aacttcagca cccaggcccg ggccaagaca gagaacccgg gcagtattag
                                                                      360
gatatecaag eegeetagee egaageeeat geetgteate egagtggtgg aaacetgage
                                                                      420
tgcctggaga tggttgctgc cattgctgct gcctctgcct cggagaagcc cactgccct
                                                                      480
gttggctgtt aacactgcct ttgacttcct gactgtcccc tggctgcacc caggacttcg
                                                                      540
ggctcctgtg tctcaccatt cccaagcccc tggccactct aagctgggca gacggagcac
                                                                      600
gagcacctat tcaaggcact gcagcccttt ggaagacatt gtcctgcaag caggagccag
                                                                      660
ggcaatatct atattcctac agtgactatt tttttttgt agagagcctc ccttctgttg
                                                                      720
tagactggac tetggetgeg ceataageea ggeetteate agattgggag aggtgacaag
                                                                      780
atttgeetea gecataaaag etggagaeae agatgteeag agtgattgga gaatgteetg
                                                                      840
ggggaatgaa gttccttcca caaacacagc tcagttctta gcaacaaact gtttgtttt
                                                                      900
ctacttgctc catctgcagc ctacgctgcc ctggcctcct gcagacagat agtggggtta
                                                                      960
cctggcaagg cctggtgaga gccagtgaac ctaagetttg actgggtgge ctcgtettte
                                                                     1020
tggggaggag ggaatgtaca ttcagggagt agccttttgc ggaaaaattc tctagggcta
                                                                     1080
cagacagtea tgtgtgaett etetetgetg tgaaaaetee cagagtetet ttagggattt
                                                                     1140
tecetaaggt gtaecaccag geacacetea gtettettga eccagageet gaaaactgtt
                                                                     1200
ttcactgggt tccaccagtc ccagcaaaat cctctttgta tttattttgc taagttattg
                                                                     1260
gtggttttgc ttacatctca tgattgatat aataccaaag ttctatagcc ttctcttgca
                                                                     1320
gtatttggat ttgcttgaaa ccgggaaaac tgttcccatt aggcttgtta atgtcagagt
                                                                     1380
gacactatta tgaatettte tetecettte etetgeetgt ttettetete ttteteette
                                                                     1440
aaacttgctc tgcagctaag gaaggtgagt ctactttccc tgaggctttg gggtcagagt
                                                                     1500
```

```
atatgttgtt tggagaaaga gggcaatcag gactcttctg ggacccagat gagttcttca 1560 ctagcccttc tgaacccctt gctccataat tggtctttta tcctggctct gaatgaccct 1620 gcaggtcatc atggttttct ttttttattg gtttttttt tttctgaaac aaagtctcat 1680 tctgcaaccc aggctggagg gcaggggcg gatctcagct cactgcaacc t 1731
```

```
<210> 5010
<211> 1128
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1091)...(779)
<223> similar to gi726373 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5010
aggtggggcc tagtgggagg tgactggatc atgggggtgc atttctcatg aatggtttaa
                                                                       60
cagcatteca ettggtaetg teetettgag tgttettgtg agatetgggt gtttaaaaca
                                                                      120
tgtgtggcac ctcctcctgc gcccccttgc tcctactctg gccacataag atgtgtctgc
                                                                      180
ttcccctttg cctttccact atgattgtaa gtttcctgag gcctccccag aagcagaagc
                                                                      240
tactatgett cetgtatage etgcagaact gtgagecaat taaacetett ttetttataa
                                                                      300
attaaattac ccagtctcag gtatttcttt acagcaattc gagaatggat taatacaatt
                                                                      360
gccaattttc cttttcttt tttaaaaaat aaaagccaaa ataacacttt taagatcca
                                                                      420
ggttttagac aaggcagctg tagtctctcc atcatcctca ctgtccattt gcttcttcct
                                                                      480
gggacagaca ctgtggccca gtgaagctga ggggaccctg ggattcaaag ctggtggaat
                                                                      540
ggaccetece tecceccaca agetgtaata acetgetgga ateccacaca acetgaggge
                                                                      600
ttcacttgtc aacagctccc ttccctcaga ggctattttg aggcaggcat tcggtgtttt
                                                                      660
atgactgage tacccaggag aatggtttga ggccacacte aactgtteca aggagcagca
                                                                      720
ctggaccaaa ggctgcttgg ttccctgcgg ttcctgatgc caccccttct cttcagggtg
                                                                      780
gttacctggc agaaggcgtc caatgcatcc tccagtgtcc cacgagggtt tccgctgaag
                                                                      840
gagccggcgg ggatgtagta catgggcacc agcagcaggg agaggatcac aaagccaaag
                                                                      900
aggeceteag tgecaactge eegeagtggg tgeacattgt gtttgtagae gaacttetee
                                                                      960
totagcacca totggatggc aacgatgate tgggecatga tgateaacag gteeectgtg
                                                                     1020
atcacttege tgagettgtg etgaetgteg tgettgetea ggaggteage caggeeeacg
                                                                     1080
accaccaget cegeaaggee ttegatgaat teetcaegeg gteaatee
                                                                     1128
```

```
<210> 5011
<211> 2377
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2378)...(808)
<223> similar to gi4240149 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5011
60
gaaaagaaaa ctttgccctt caattcaaac tctgttatgc cacatttggc ataaaatgct
                                                                     120
taccattacc taaaaatgat tttttaaaaa atgcttatca ttacctaaaa gaaaaatgta
                                                                     180
gcaaaattca actttggagg aaaatgaaaa ctgtacatat ccttgagaac cacggaaagc
                                                                     240
taagagatat agaaaattgt acattcccac aaagttattt caacaaagag gcattatctg
                                                                     300
cattccacca aggtcagtcg agttgaggag aaagagaagc aaatgccaag aaattggctg
                                                                     360
catatttttt ttttaatctg ttttgcctta aatcacaaaq aqcaatqqqa aqaacaaqct
                                                                     420
ccctttctcc ttttctcaga cacctttggt ctaaagttgt tctttttcta gttcttccct
                                                                     480
cccctgtaat ttttaattat cagaaataaa taccagtgca tttcaggtgg tcgtctgtgt
                                                                     540
tagagtgcat aactgaagtt attagtggct tgggagtttg cacatataac tggaggtaaa
                                                                     600
cagcagatta ctacacctaa tctcaccctg agcatttctc ctctgtcaag tctaaattct
                                                                     660
gccatcttct tttgcaaaaa caagcagaca tccccaccaa aggccaaaat ataatgataa
                                                                     720
ctgacagtga acagaaaccc attgtaaaga caaactattc cagctttcaa attcactgtg
                                                                     780
actggatact attagttttt tgagtttata actccccaga attgtcaaaa gtaaccttgt
                                                                     840
agccaatccg cttgcagaca ctaaaaacca cctgaaatag gccacccagg gtaccaaaag
                                                                     900
cagtgtcaaa gagcagtgag acagtgccac caaggcccag tgcaatgtcc ttgcaaacaa
                                                                     960
ttggaatagc gcccatggtg tacacaggga aagtggccac atccacaagg acacggacag
                                                                    1020
ggatgctcag aactcggcaa atggccttca gcagacaaca aaggatccgg aggagagcc
                                                                    1080
tgatgacttt ggccacgacc ttgagcacct tccagggaat gctcaccaac tcttccccaa
                                                                    1140
tggccatgaa gtatgagatg gtggctgagc ccaggcggta aaggcaactt tctatgccat
                                                                    1200
taatcacctg cttggtaaca caccacagga aatagacaat gttcttcagg attgctacca
                                                                    1260
caaggtaata aattaattga aaaagcttga tgaatggggt agcaatgaag cccatgagtt
                                                                    1320
ttcccaaaaa gctactactt ccctcagatg cctctggagg caacagagta gacctcttgc
                                                                    1380
tcctggtgct agaaagggga ctagaactct tttgagattg taccattcgt tcttcatcct
                                                                    1440
ggatttggtt aaccacttcc aggatttttt tcattttctc tgtgtcttgc tcagtttcac
                                                                    1500
cacagttgtt ctgaaacagc tgagggttaa atggaagcag tttctgaaga tcttttacca
                                                                    1560
teacatette tatgatgtea etgteeeggg tgtgettgae aaageeeatg geeeageete
                                                                    1620
ctccagggac agcacaacag gctgccagcc aaacaaactc agggactgcc actttgtctt
                                                                    1680
taactotgta gtotgagggo actgtgcctg tgaggatata taggtottoo coactgccac
                                                                    1740
actgtggggt caaagcccgg tccattaggc tgtggagatt cacataccac cgttcctgga
                                                                    1800
aggactgagt cattggggct gaatttgtga gagtaaatgt ggccacctgg acatcactgc
                                                                    1860
taagggagaa tgggtaaagc tgtcctcttt ggtaatcaga atcaaggtaa tctgtattca
                                                                    1920
aggettgett getteecagg etgtteacag aggtgatgge etetgeetea ttaategeet
                                                                    1980
ceteaaggtt getgttgggg teategatet geggeteeae eagecatege tgeteggege
                                                                    2040
cgccgggcgc agggcgcggg gcgcggaacg cggagtacac ggggatgcgg tcccgggtgc
                                                                    2100
tgtagagggt ggcgaagcgc tcagcaccct ccgcgcgctg acagatcttc acgtgggaat
                                                                    2160
cggccgccag ccccgcaggc ggggtcccgg cgtagaagaa cttgtcacat tcgccaaagc
                                                                    2220
eggetteete etegeeeaeg ageeggeett ceageageee ageeagggeg aagaggetge
                                                                    2280
ccagcgcgag ccagcgcgcg gtgcccatgg cggcctctgc gagcgcggcg gggccgagcg
                                                                    2340
gctgggctgc cgcggcgcga gctctgcagg ctgggcg
                                                                   2377
```

```
<210> 5012
```

<211> 5122

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature <222> (2)...(3744) <223> similar to gi189036 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5012 ccaggagttt cggcagagat atgagatcct gactccaaac tccattccca agggtttcat 60 ggacgggaag caggcgtgcg tgctcatgat aaaagccctg gagctcgaca gcaatctgta 120 ccgcattggc cagagcaaag tcttcttccg tgccggtgtg ctggcccacc tggaggagga 180 gegagacetg aagateaceg aegteateat agggtteeag geetgetgea ggggetaeet 240 300 ggccaggaaa gcatttgcca agcggcagca gcagcttacc gccatgaagg tcctccagcg 360 gaactgoget gootacotga agotgoggaa otggoagtgg tggoggotot toaccaaggt caagccgctg ctgcaggtga gccggcagga ggaggagatg atggccaagg aggaggagct 420 480 ggtgaaggtc agagagaagc agctggctgc ggagaacagg ctcatggaga tggagacgct gcagteteag eteatggcag agaaattgca getgeaggag cageteeagg cagaaacega 540 getgtgtgee gaggetgagg ageteeggge eegeetgaee geeaagaage aggaattaga 600 agagatetge catgacetag aggecagggt ggaggaggag gaggageget accageacet 660 720 gcaggcggag aagaagaaga tgcagcagaa catccaggag cttgaggagc agctggagga 780 ggaggagagc gcccggcaga agctgcagct ggagaaggtg accaccgagg cgaagctgaa 840 aaagctggag gaggagcaga tcatcctgga ggaccagaac tgcaagctgg ccaaggaaaa gaaactgctg gaagacagaa tagctgagtt caccaccaac ctcacagaag aggaggagaa 900 atctaagagc ctcgccaagc tcaagaacaa gcatgaggca atgatcactg acttggaaga 960 gegeeteege agggaggaga ageagegaca ggagetggag aagaceegee ggaagetgga 1020 gggagactee acagacetea gegaceagat egeegagete caggeceaga tegeggaget 1080 caagatgcag ctggccaaga aagaggagga gctccaggcc gccctggcca gagtggaaga 1140 ggaagetgee cagaagaaca tggeeetcaa gaagateegg gagetggaat eteagatete 1200 tgaactccag gaagacctgg agtctgagcg tgcttccagg aataaagctg agaagcagaa 1260 acgggacctt ggggaagagc tagaggcgct gaaaacagag ttggaggaca cgctggattc 1320 cacagetgee cageaggage teaggteaaa acgtgageag gaggtgaaca teetgaagaa 1380 gaccetggag gaggaggeca agacecacga ggeccagate caggagatga ggeagaagea 1440 ctcacaggcc gtggaggagc tggcggagca gctggagcag acgaagcggg tgaaagcaaa 1500 cctcgagaag gcaaagcaga ctctggagaa cgagcggggg gagctggcca acgaggtgaa 1560 ggtgctgctg cagggcggaa gggactcgga gcacaagcgc aagaaagtgg aggcgcagct 1620 gcaggagctg caggtcaagt tcaacgaggg agagcgggtg cgcacagagc tggccgacaa 1680 ggtcaccaag ctgcaggtgg agctggacaa cgtgaccggg cttctcagcc agtccgacag 1740 caagtccagc aagctcacca aggacttctc cgcgctggag tcccagctgc aggacactca 1800 ggagetgetg caggaggaga accggcagaa getgageetg agcaccaage teaagcaggt 1860 ggaggacgag aagaatteet teegggagea getggaggag gaggaggagg aggeeaagea 1920 caacetggag aagcagateg ceaceteea tgeecaggtg geegacatga aaaagaagat 1980 ggaggacagt gtggggtgcc tggaaactgc tgaggaggtg aagaggaagc tccagaagga 2040 cctggagggc ctgagccagc ggcacgagga gaaggtggcc gcctacgaca agctggagaa 2100 gaccaagacg cggctgcagc aggagctgga cgacctgctg gtggacctgg accaccagcg 2160 ccagagegeg tgcaacctgg agaagaagca gaagaagttt gaccagetee tggeggagga 2220 gaagaccatc tetgecaagt atgeagagga gegegaeegg getgaggegg aggeeegaga 2280 gaaggagacc aaggetetgt egetggeeeg ggeeetggag gaageeatgg ageagaagge 2340 ggagctggag cggctcaaca agcagttccg cacggagatg gaggacctta tgagctccaa 2400 ggatgatgtg ggcaagagtg tccacgagct ggagaagtcc aagcgggccc tagagcagca 2460 ggtggaggag atgaagacgc agctggaaga gctggaggac gagctgcagg ccaccgaaga 2520 tgccaagctg cggttggagg tcaacctgca ggccatgaag gcccagttcg agcgggacct 2580 gcagggccgg gacgagcaga gcgaggagaa gaagaagcag ctggtcagac aggtgcggga 2640 gatggaggca gagctggagg acgagaggaa gcagcgctcg atggcagtgg ccgcccggaa 2700 gaagetggag atggacetga aggacetgga ggegcacate gaeteggeea acaagaaceg 2760 ggacgaagcc atcaaacagc tgcggaagct gcaggcccag atgaaggact gcatgcgcga 2820 gctggatgac acccgcgcct ctcgtgagga gatcctggcc caggccaaag agaacgagaa 2880

```
gaagetgaag ageatggagg cegagatgat ceagttgeag gaggaactgg cageegegga
                                                                     2940
                                                                     3000
gegtgecaag egecaggeee ageaggageg ggatgagetg getgaegaga tegecaaeag
                                                                     3060
cagoggcaaa ggagcootgg ogttagagga gaagoggogt otggaggooc gcatogooca
                                                                     3120
gctggaggag gagctggagg aggagcaggg caacacggag ctgatcaacg accggctgaa
                                                                     3180
gaaggccaac ctgcagatcg accagatcaa caccgacctg aacctggagc gcagccacgc
ccagaagaac gagaatgctc ggcagcagct ggaacgccag aacaaggagc ttaaggtcaa
                                                                     3240
getgeaggag atggagggea etgteaagte caagtacaag geeteeatea eegeeetega
                                                                     3300
                                                                     3360
ggccaagatt gcacagctgg aggagcagct ggacaacgag accaaggagc gccaggcagc
                                                                     3420
ctgcaaacag gtgcgtcgga ccgagaagaa gctgaaggat gtgctgctgc aggtggatga
cgagcggagg aacgccgagc agtacaagga ccaggccgac aaggcatcta cccgcctgaa
                                                                     3480
gcagctcaag cggcagctgg aggaggccga agaggaggcc cagcgggcca acgcctcccg
                                                                     3540
ceggaaactg cagegegage tggaggaege caetgagaeg geegatgeea tgaacegega
                                                                     3600
agteagetee etaaagaaca ageteaggeg eggggaeetg eegtttgteg tgeeeegeeg
                                                                     3660
aatggcccgg aaaggcgccg gggatggctc cgacgaagag gtagatggca aagcggatgg
                                                                     3720
ggctgaggcc aaacctgccg aataagcctc ttctcctgca gcctgagatg gatggacaga
                                                                     3780
cagacaccac agecteccet teccagacce egeageaege eteteceaa ettettggga
                                                                     3840
etgetgtgaa catgeeteet eetgeeetee geeegteee eecateeegt tteeeteeag
                                                                     3900
gtgttgttga gggcatttgg cttcctctgc tgcatcccct tccagctccc tcccctgctc
                                                                     3960
agaatetgat accaaagaga cagggcccgg gccaggcaga gagcgaccag caggctcctc
                                                                     4020
agecetetet tgecaaaaag cacaagatgt tgaggegage agggeaggee eeeggggagg
                                                                     4080
gcagagtttt ctatgaatet atttttette agactgagge ettttggtag teggagetee
                                                                     4140
cccagtcgtc agcctccctg acgtctgcca ccagcgcccc ccactcctcc tcctttcttt
                                                                     4200
getgittigea ateacaegtg gitgaeeteac acaeetetge eeettigggee teecaeteca
                                                                     4260
                                                                     4320
tggctctggg cggtcagaag gagcaggcct gggctccacc tctgtgcagg gcacagaagg
ctggggtggg gggaggagtg gattcctcct acctgtccca gcagcgccac tgtcgctgtc
                                                                     4380
toctotgatt ctaaaatgto toaagtgcaa tgooccotoo cotootttac cgaggacago
                                                                     4440
ctgcctctgc cacagcaagg ctgtcggggt caagctggaa aggccagcag ccttccagtg
                                                                     4500
getteteeeg aacaetettg gggaccaaat ataettaatg gttaagggae ttgteecaag
                                                                     4560
tetgacagee agagegttag aggggeeage ggeteeeeag gegatettgt gtetaeteta
                                                                     4620
ggactgggcc cgagggtggt ttacctgcac cgttgactca gtatagttta aaaatctgcc
                                                                     4680
acctgcacag gtatttttga aagcaaaata aggttttctt ttttcccctt tcttgtaata
                                                                     4740
aatgataaaa ttccgagtct ttctcactgc ctttgtttag aagagagtac tcgtcctcac.
                                                                     4800
tggtctacac tggttgccga atttacttgt attcctaact gttttgtata tgctgcattg
                                                                     4860
agacttacgg gcaagaaggg cattttttt ttttaaagga aacaaactct caaatcatga
                                                                     4920
agtgatataa aagetgeata tgeetacaaa getetgaatt caggteecag ttgetgteae
                                                                     4980
aaaggagtga gtgaaaacac ccaccctacc ccctttttta tataataaaa gtgccttagc
                                                                     5040
atgtgttgca gctgtcacca ctacagtaag ctggtttaca gatgttttcc actgagcatc
                                                                     5100
acaataaaga gaaccatgtg ct
                                                                     5122
```

```
<210> 5013
<211> 866
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (867)...(574)
<223> similar to gi4455118 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5013
ccgatggaga tagccatttt aaaagttttc gatccccttc tttaaaggcg aaatgttttt
                                                                       60
cageceagat aaagecattt taaaagtttt eggteeeett etttaaagat gaaaagtata
                                                                      120
                                                                      180
tectaetttt tgttaaatgg atattteett teaatgataa egtteaaaat tteeetgggt
tttttcccct ttctgagagt taagccattt gaattacctt tattctaacc acaaaatttt
                                                                      240
ttttgtaggg ttttttttt tggttttttt ttgtcttttt ttttgcgttt aaaacatttg
                                                                      300
ggctattccc tgacgatcta tacatgtaaa tttgattgct aaacattgtc actttgaatg
                                                                      360
tcaaactatt tttaatctat tgattttgat taaaaatcat aatacaaaca gagctaaaat
                                                                      420
cacgctaaca aaataaacta aatatgaaaa gttgcattga aagggcatca cattattctt
                                                                      480
aataggatcg tgtagaaaca ttccaatggc agtgttctca aaataaaaca aaattacatt
                                                                      540
agaagacete cageetggee acttttggga cettacetgt aactetgget ggtgggtgte
                                                                      600
tttactcttg tactacatgg ctcacttaca tcagacatca tatttgtata ccctgagaaa
                                                                      660
tetgacactg aagteettae tetatggtee acttetecat tagagttagt gataaaggte
                                                                      720
                                                                      780
attggcacco tgctgcccga cttaaactga gaaccaaacg cttgtgcaaa gttctcaatc
tgatacgttg ttctaggctc tatgtctttc tgaggatcta tctggctagc taactcctga
                                                                      840
                                                                      866
gatggaatct gaaagcctgt tgaaga
```

```
<210> 5014
<211> 5024
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (125)...(790)
<223> similar to gi4980899 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5014
agtgtggtgg aattcgcaag tattatgcta accagtattt tcttaatttt agttttctca
                                                                       60
                                                                      120
taagattcac cttgaaacta tgtgtgaagt aaagaaaatc taccttcagg atgagtttag
aattttgaag aaaaagteet teaettttee aagagaeeat aagteagtta eagetgatae
                                                                      180
agagatgtgg cctgtctatg tggaattgac caatgaaaag atatatggct gcgatttcat
                                                                      240
                                                                      300
tgtcagtgct acaggagtta caccaaatgt agaacctttt ctccatggta acagttttga
tctaggagaa gatggtggcc tgaaagtgga tgatcatatg cacacatccc ttcctgatat
                                                                      360
ctatgctgcc ggtgacatct gtactacatc ctggcagctg agcccagtct ggcagcagat
                                                                      420
                                                                      480
gaggetgtgg acceaggeta gacagatggg atggtatgca gcaaagtgca tggctgcagc
                                                                      540
gagttcagga gactctattg acatggattt cagctttgaa ctgtttgctc atgtgacaaa
attttttaac tataaggttg tactgctggg aaaatacaat gcacagggct taggttcaga
                                                                      600
tcatgaatta atgctgagat gtaccaaagg acgagaatac atcaaagtcg tcatgcaaaa
                                                                      660
                                                                      720
tggacgaatg atgggagetg tettaattgg tgaaaccgat ttagaagaaa catttgaaaa
                                                                      780
cctaatctta aaccaaatga atctttcatc atatggagaa gatctgctag atccaaatat
tgatatagaa gattattttg actaaaaatg gaatttcttc aggaatcata taaagttcca
                                                                      840
                                                                      900
aatgacacca gaaaaatcac aagtcaataa aatgaatgac tgtattgagt taatgatgac
cacactgaaa attacagaag tgataatgat atttgtggaa aaatataaaa acataaattc
                                                                      960
taagtttgaa atcagttcaa agtttattta tagatatatc tttccaacac aacactgacc
                                                                     1020
gcttagataa aaatcttaag ttatttattt ctgtgtttta aacataaata tgtttacttg
                                                                     1080
tgatttagct ttggagcaaa tttaggtaag ttatctactt agccaaatgt actctagtag
                                                                     1140
                                                                     1200
actagaacca ttctttgtga aatgtcaaaa tatggctatg gtttcaggaa ctttaaaatc
                                                                     1260
ggttgtattt tactttaaat agagatgtag caatatctcg tttgctaata tttatattga
```

```
tgacttactc cttttttgtt gaattgtact tctggtttta taacctgaaa tcatttacaa
                                                                     1320
                                                                     1380
gettgtccaa etetageeca egggtetaat geageecaga acagetttga atgeageeca
                                                                     1440
acacaaatct gtaaactttc ttaaaacatg agatttttct tgcaattttt tttttttaa
                                                                     1500
gctcatcagc tatcgtcagt gttagcatat tttatgtgcg gcccaagaca attcttcttc
caatgtggct cagggaagcc aaaagattgg acatccctga tctacatatt taacttaaag
                                                                     1560
tatcactcag ggaacctctg tcagtataat attgctttca aaaagatggt tatgtcaaaa
                                                                     1620
gaaaaaatat agctaagtat ataaaggcat aaaaaactta agacaattac atgaacttat
                                                                     1680
                                                                     1740
tctcaaatat tttacatttt ttgtaaactt tcttaaaaca tgagattttt cttgcaattt
ttttttttt ttttaagctc atcagctatc gtcagtgtta gcatatttta tgtgcggccc
                                                                     1800
                                                                     1860
aagacaatto ttottocaat gtggotcagg gaagocaaaa gattggacat cootgatota
                                                                     1920
catatttaac ttaaagtatc actcagtgaa cctctgtcag tataatattg ctttcaaaaa
gatggttatg tcaaaagaaa aaatatagct aagtatataa aggcataaaa aacttaagac
                                                                     1980
aattacatga acttattctc aaatatttta cattttttgt aaactttctt aaaacatgag
                                                                     2040
                                                                     2100
attitititg caattititt titaagetea teagetatea teagigitag catattitat
                                                                     2160
gtgcggccca agacaattct tcttccaatg tggctcaggg aagccaaaag attggacatc
cttgatctac atatttaact taaagtatca ctcagtgagc ctctgtcagt ataatattgc
                                                                     2220
                                                                     2280
tttcaaaaaq ataqttatgt caaaagaaaa aatatagcta agtatataaa ggcataaaaa
acttaagacg attgtatgaa cttattctca aatattttac atttaaaggg ttttacataa
                                                                     2340
                                                                     2400
aaatttttcc cttgttttat actggaaaat tatataattc atgatctcta attttcaaac
                                                                     2460
attotoaaaa gtttagatot toagagataa gototgaaaa tatagatooa tacatataaa
                                                                     2520
atatctatga aattctttta aaaactattg tctaactaca aaaataatgg catatacatg
                                                                     2580
cataaaccat ctttaattag aaaatttagt aacattcata tcaggcatca tcgattgttc
ttttcttagc tcctgtattc ttagaaccag attgctgaag catgtttgca gccttcttct
                                                                     2640
ggaagttgcc tgaatttttt ttcctccatt ctttttatca ccttgttcag aatgacaagt
                                                                     2700
                                                                     2760
ttgagacgat tcagccctga aagagttctg cgtggacttt gtcacttgca tagtaatagc
atgtgcctca ttgttcagaa gattagcttt aggtcctatt ttcaaatacg aaatggcagc
                                                                     2820
ataagctgta aaactgtagt cttctttaag atactgctgt attagaaagt gtgcaataat
                                                                     2880
cttctccaga tcttcacgag gaagtgtggg agccacaaca cctgctactc tcagttttgc
                                                                     2940
tgcacccttt cccatccaag aatcaatcag tttcaatgga gtgagttttt cattcagttc
                                                                     3000
ctctgcctgc ttcaggatct tgattagatc tctgcagtac tctgttatgt tcgttctttc
                                                                     3060
aaatgcactg totttacago agttatogca cattttgtta catgottotg agttocatac
                                                                     3120
                                                                     3180 4
ttcatcaaaa tgttgagcca tcaacacacg acgagatttg cttatgtttt gacagtatga
                                                                     3240
taccatctca taaagcttct gctgtcccac attttccatc accaccattg aacttattct
gaatatatet ecaaageegt agtacaaaat acagtetget tteatgteat etegacetge
                                                                     3300
                                                                     3360
acgtecacte tettggtaat aattttecat ggatttacte attgaatgat ggataacaaa
cctcacatct ggcttatcaa ttcccatacc aaatgcaaca gttgccacta ctacctgaat
                                                                     3420
ttcattggct gaccattttc tatgaactgt ggtcttatct tctggctcca aattggcatg
                                                                     3480
gtaagcacct gcatgaattc ccagattctg caaactaacc gtaacttgtt cagagtcttt
                                                                     3540
                                                                     3600
ctgagaaaaa caatatatga ttcctgattg ccctttgtat ctcccattaa tgagctttac
                                                                     3660
aatatcctca ataaaatctt cagtgtttga gggcttctgc cgaacctcat aatatagatt
                                                                     3720
tggcctatta aaagaagctg taaaagtaaa acacttttca atgcacaaaa ttttctgagc
atccgtcaaa acgtgatttg ttgcagttgc agtcagccca attagtgatg cgttagggaa -
                                                                     3780
                                                                     3840
ctgccgcttt aagataccaa gtgccttata atcaggtctg aaatcatgtc cccactgact
acagcagtga acttcatcca cagcaattcg agtaaatctc cttgcttcat aggctttctc
                                                                     3900
                                                                     3960
tagtettgae ataaacattt tgetttttge aattttetet ggagteacat aaateagett
taactcggag titttattta ccatttcatc atgaacccat ttaacatgct ccttagaact
                                                                     4020
agaagcattt aacatggttg ctgaaattcc taattgtttt aaaaccatta attggtcttc
                                                                     4080
                                                                     4140
cataagagag atcaatgggc aaatgacgag tgtaaaacca tctgaacata atgctggtaa
                                                                     4200
ctggtaacat aagctctttc cacctcctgt aggcataaca agaaatacct cctttccagc
cattgttacg ttaatagttt caagctgaag tggtctgaac ttttccagtt taaagacatt
                                                                     4260
                                                                     4320
ttgcaqaata tetttaaett taecagaeca tggaaaatet tetttattee aageggeagg
tgaagaatca tattcattgc ttgccccggc atcagaatcc tctaaacact gctttatttt
                                                                     4380
ctttgtcagg acttttttt tctgaataag ctcttgttgc ctttccgtaa gttcttgaat
                                                                     4440
ttgaatttct actgcatgta gctcactggt tatagaatcc agttcctcag ttagagctga
                                                                     4500
aacggacgcc attetttte tttecaaatt gtttetaaaa taatecaaat ttetttaaca
                                                                     4560
aatggcagct gctaataaac aggctttggt ggccaatcct cctgcatgga aaagaatggg
                                                                     4620
                                                                     4680
gagatcagaa gaccggtcag caggcgaacg tgcccctaaa ggcccgagtt ctcagagcag
```

```
ggcagtgatt aactttccgg tttctcctcc gccaatgtgt gggcgaaagg aagtgatccg
                                                                     4740
catcagaccg gcctcgcctg cagcaggaaa gggaaggatg aaagaaaaag cgcacaccct
                                                                     4800
tgaccettca aagetgtaac agtagttate ceagageetg teeceaecga gaageecagt
                                                                     4860
ctaacteted ggtgtttgac tgtccggtgt ccgactgtcc tgtgtccgac tctccgatct
                                                                     4920
cogactotog gatotocgac accaaagcac coaggootog agcaqatott ttoqotacto
                                                                     4980
ctacctatct aaaattttat actaataatc ttataaaaaa aaaa
                                                                     5024
```

```
<210> 5015
<211> 918
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1) . . . (919)
<223> n = a,t,c or g_{y}
<220>
<221> misc feature
<222> (128)...(458)
<223> similar to gil857435 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

```
<400> 5015
ctgggccagt ggtatgagca cggtgccagg tggctcccgc cactccctgg ggatccaagt
                                                                   60
gcggggtggc tggggtgtaa ctgggggaga ggaggagagc ctcactgtcc ctgtcgctga
                                                                  120
cacctggcag gcggggagct ttaaggtggc cacccaggag aggaaccccc agagagccca
                                                                  180
gatgaggetg eggaggeaga agaagggtgt ggteeeette etggggggatt ttetgaetga
                                                                 240
gttacagagg ctggattcgg ccatcccgga cgacctggat ggcaacacca acaagaggag
                                                                 300
caaggaggte egagttetge aggaaatgea getgeteeaa gtggetgeea tgaattacag
                                                                 360
getteggeet ettgagaaat ttgteaceta ttteacaaga atggageage teagtgacaa
                                                                 420
agagagetae aagetgteet geeagetgga geeegaaaae eegtaggetg geaacateet
                                                                  480
gcagtggctg ggaacccacc gggatgctgg ccagaacacc ggctctgcac catccctcac
                                                                 540
600
ctggatcete atcaccaact geteetgetg gecaggatea ggecatggga ettttgtgag
                                                                 660
tcaggcggga gaccatttta tgtttatttt ctttagtgta taagtaaggg ttttttctta
                                                                 720
actttcgtta aaataaaatt ttaaaaaact attcaaaatg ttctgtagtt gttggaatga
                                                                 780
gaaaagtaac tccagtgcgg taaccatata ccagtcttta ggattcatag cctagcatgt
                                                                 840
caaattgagg ctatggctga ccaagttatg gaatagctgt cncgtcttac ggtctctate
                                                                 900
anggtctcat tggagtgc
                                                                 918
```

```
<210> 5016
<211> 1625
<212> DNA
```

```
<220>
<221> misc_feature
<222> (30)...(215)
<223> similar to gi2662057 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5016
ggattatecg ggtegaceca egegteegee caaaagaggt taacettgat tttcacacaa
                                                                       60
atgaagteat tacaaacage atcacteaac etaceeteca cagttttgat getgeacaaa
                                                                      120
gcagagtgta tcagctcatg gaacaagaca gttatacacg ttttctgaaa tctgacatct
                                                                      180
atttagactt gatggaagga agacctcaga gaccaacaaa tcttaggaga cgatcacgct
                                                                      240
catttacctg caatgaattc caagatgtac aatcagatgt tgccatttgg ttataaagaa
                                                                      300
aattgatttt geteattttt atgacaaact tatacatetg ettetaacat ategeatgtt
                                                                      360
tatgttaaga tttggtccca tcctttaaac tgaaatatgt catgtgaaat tattttaaaa
                                                                      420
atgtaaaaac aaaactttet getaacaaaa tacatacagt atetgecagt atattetgta
                                                                      480
aaaccttcta tttgatgtca ttccatttat aatcagaaaa aaaacttatt tcttaatcaa
                                                                      540
aaggcagtac aaaaaaagta ataatgtttt ataagattgt agagttaagt aaaagttaag
                                                                      600
cttttgcaaa gttgtcaaaa gttcaaacaa aagtctagtt gggatttttt accaaagcag
                                                                      660
cataatatgt gttatataaa cataataata ctcagatatc caaatgttca gatagcattt
                                                                      720
ttcataatga atgttctctt ttttttggta atagtgtaga agtgatctgg ttcttacaat
                                                                      780
gggagatgaa gaacatttat tattgggtta ctactaaccc tgtcccaaga atagtaatat
                                                                      840
cacctctagt tataagccag caacaggaac ttttgtgaag acacattcat ctctacagaa
                                                                      900
cttcagatta aatataatct agattaatga ctgagaataa gatccacatt tgaactcatt
                                                                      960
cctaagtgaa catggacgta cccagttata caaagtactt ctgttggtca cagaaacatg
                                                                     1020
                                                                     1080
accagatttt gcatatctcc aggtagggaa ctaagtagac taccttatca ccggctaaga
aaacttgcta ctaaactatt aggccatcaa tggcttgaat aaaaaccaga gaaggttttt
                                                                     1140
cccaggacgt ctcatgtttg gccctttaga attggggtag aaatcagaaa tgagatgagg
                                                                     1200
ggaagaagca aggagtctaa ggccctagcg atttgggcat ctgccacatt ggttcatatt
                                                                     1260
cagaaagtgt tatctcattg attatattct tgttaagcaa atctccttaa gtaattatta
                                                                     1320
ttcaaataag attatactca tacatctata tgtcactgtt ttaaagagat atttaatttt
                                                                     1380
taatgtgtgt tacatggtct gtaaatattt gtatttaaaa atgccatgca ttaggctttg
                                                                     1440
gaaatttaat gttagttgaa atgtaaaatg ggaaaacttt agatcatttg tagtaataaa
                                                                     1500
tatttttaac ttcattcata cagttaagtt tatctgacaa taaaagctct gactgaatgg
                                                                     1560
tgattatcct tcctattatg taataaggaa taaacatttt cttcttttag agtggaaaaa
                                                                     1620
aaaaa
                                                                     1625
```

```
<210> 5017
<211> 758
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (28)...(315)
<223> similar to gi507319 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5017 cggacctgta ttgggaacaa tgtttttggg aacgcgtgca tctctgtgct gagccctggg 60 actgtgataa cggagcacta tggacccacc aacatccgca tccgatgcca tttaggtctg 120 aaaactccaa atggctgtga gctggtggtg gggggagagc cccagtgctg ggcagaaggg 180 egetgeette tetttgatga etettteetg catgetgegt tecatgaagg tteageagag 240 gatggcccac gggtggtttt catggtggat ttgtggcatc caaacgtcgc agcggccgaa 300 eggeaggetè ttgattteat etttgeteeg ggaegatgag agtattteee atgetggagt 360 cggcgagaag ggccgaggcg gggcctgggc agactgtggt ccggtccagt ccctaccggt 420 gttgtttcca tgctcagaaa cctgcctcag cggaaagctc ttatttggga ttttatatca 480 tgtcgggtcc ctctttccct tggttattgt aaatggaaac ttttcggctt gtatttcctt 540 agattttttt ttttttcct tecaatcatt tgetteagag acteetttet ggeetaacag 600 cgcattcctt tgattggtcc ttgagtgacc agagacttag tgcccttgta agtctgtctt 660 ctgttgctac ttgttttttt cagtgctctg aaatagagta acctaaatgg ttatttgtct 720 gaatataata atgtaaaact tettgtgggt catettaa 758

```
<210> 5018
<211> 2409
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2410)...(265)
<223> similar to gi5739208 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5018
tttggacaat gaaatccttt taattgaaaa gtatatataa aatggcttta gacataaaag
                                                                        60
ataagtattt tacattattt ettetgttat atttttaege titgtgeeag aatttaette
                                                                      .120
ttgcaactat tettgettta tetggaacag tttacteegt tattgaatat etattagtgt
                                                                       180
ttaatataga agagettaat aaacegetaa teegaaaata atggtattee ettgetttte
                                                                      240
agacettett getgaatatg ettatttatg tecaatgtgg aaatetgate etgetetett
                                                                       300
ccactetgee ageagtteet tttgtactge ttetggtagt teatagaaaa ettgaggate
                                                                      360
aatgtcagaa gggaaagtaa ttttctcatc aacagaatct ggctctctat tttctgtaag
                                                                       420
teetteafga gagtetgttg etaetgtttg ettatggeta tetgtagtgt ggtttetgga
                                                                       480
gaaaagttgc tcactctgca agtttggaaa tgaatgaaaa gcagacacag cagggtttga
                                                                       540
attiguaaag tggaatcott gaggttottt aggtoottga ottattogtt catottttaa
                                                                       600
totattatot aaataatatg aataatoott ttggotagac atgtaagaag aactactgot
                                                                       660
attaaageet gatgtteeeg gtteacaagg agatacagag gatacetgtt tgetaetgga
                                                                       720
taaatgatet etaggattta tgggaatate ttgeatttgt tttttagaaa agaaagataa
                                                                       780
tactcctcta gaggcatgta atggacaact cacacttcct ttcccttgaa atttttccct
                                                                       840
agattttcca gaaaggattt cttcttgaat atctactgga agctgcttga agacttcttg
                                                                       900
gtcaacacet teaggaagtg aacagagtgg gaatteatta atgtettttt etttagaaaa
                                                                       960
atttgtggta totagtggag actccctagt tottgtactt toaattotto cacttggtag
                                                                      1020
gaaatcccgg tttgtttctt tgtctttggg aaaatcttcc atatgagtgt ctttcatttt
                                                                     1080
aaaactgtgc ttgccagagc gtgaagtagt tgataatgat ggcattaaat aataatcaat
                                                                     1140
aagccctttc ttagcagtat ttagtgcttt aaggttgcag aagcacacac ttagaagggt
                                                                     1200
aaggtgaaat ggcatcttca cattcaccat atttcgaaaa agtttcataa gtatatcaac
                                                                     1260
cattggggtc atcacatcat aatttcctgt ccctaatttc tgaattacat gtgaaggaat
                                                                     1320
agggcactga cgactctcac gaccatagtg cttctcagag gaataccgac ggattattaa
                                                                     1380
```

```
tctcactgta tgaggcttcc tttcatcttg gcataatctg tttaaaagac tagcaagtag
                                                                    1440
ttcttcaatc ttatttttag cttcaacttc agatgaacat tttttaaatg aatcttcttc
                                                                    1500
actaaaggac tgaggtggtc ctgagagtat cacaggggag ttatcctctc caaaactgag
cttttggata cgctgagcaa ctgaaattcc taattctttt tctaaaattt tgggtgaaaa
                                                                    1620
ggtttggaga tcacgcacac tattgatacc cagtgcttca agacatttgg cagttttata
                                                                    1680
gccaatacca ggtatttcct ttatgtgatt caaactatga ataagatgtt gacaactttc
                                                                    1740
aggtaataag actgtttgtt gatttggttt aaagacacca gaaactaatt ttgccaacag
                                                                    1800
tttattagaa gccactccag cacagccagt gagccccaac tgattataca tggcttcccg
                                                                    1860
catctctgct gcaatctgag atccaacaag tagtctgatg tgcaagacgt caagcaggtt
                                                                    1920
tatagactga ttattgtata catgacccga cacagtcacc gcagaaagtt catcactttg
                                                                    1980
cagctgctgt agtctcctct caaccatgtc tgttagatcc acaaaatttt catcaaatcc
                                                                    2040
aagtototoa acaactggac taaattotto cagtaattot gtaaccttat aagacattto
                                                                    2100
totgtagogg gtoaggtott otocattaac taataccaac tqtqqacact tttcttttqc
                                                                    2160
atctctgaca ttcataagtt tcttaactcc aagtttccta gcttcatagt tgcaggtaac
                                                                    2220
caccaaatat ttctgttgaa cccctaaagg tttgtctttt agctctggat ttgagatcat
                                                                    2280
ttctacttgt gcataaaagc aatccagatc cacatgtact atgactctgg atgaagcatt
                                                                    2340
tggtgtgggc aacacttgat catgaactcc ctgcgagctg gctgccgccc ccacgtccgc
                                                                    2400
cagttccat
                                                                    2409
```

```
<210> 5019
<211> 486
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)...(440)
<223> similar to gi1403532 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

```
<400> 5019
ctatcactta agagacetta teaaaageat getteatgat gatecageea gaagaattee
                                                                       60
tgctgaaatg gcattgtgca gcccattctt tagcattcct tttgcccctc atattgaaga
                                                                      120
tctggtcatg cttcccactc cagtgctaag actgctgaat gtgctggatg atgattatct
                                                                      180
tgagaatgaa gaggaatatg aagatgttgt agaagatgta aaagaggagt gtcaaaaata
                                                                      240
tggaccagtg gtatetetae ttgttecaaa ggaaaateet ggcagaggae aagtetttgt
                                                                      300
tgagtatgca aatgctggtg attccaaagc tgcgcagaaa ttactgactg gaaggatgtt
                                                                      360
tgatgggaag tttgttgtgg ctacattcta cccgctgagt gcctacaaga ggggatatct
                                                                      420
gtatcaaacc ttgctttaat cagtaaccta aggactgttt cctttttctc ctcttccatt
                                                                      480
tcttgg
                                                                      486
```

```
<210> 5020
<211> 1590
<212> DNA
```

```
<220>
<221> misc_feature
<222> (1)...(1591)
<223> similar to gi5802879 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5020
atgggtagca acagtgggca ggctggccgc cacatétata aatecetage tgatgatgge
                                                                       60
ccctttgact ctgtggagcc gcctaaaaga cccaccagca gactcatcat gcacagcatg
                                                                      120
gccatgttcg gaagagagtt ctgctacgcg gtggaggcag cqtatqtqac cccaqtcctq
                                                                      180
ctcagcgtag gtctgcccag cagcctgtac agcattgtgt ggttcctcag ccccatcctg
                                                                      240
ggatteetge tgeageeegt ggteggateg gecagegace actgeeggte caggtgggge
                                                                      300
cgccggagac cetacatect caccetggga gtcatgatge tegtgggcat ggctctgtac
ctcaatgggg ctactgttgt agcagctttg attgctaacc caaggaggaa gctggtttgg
                                                                      420
gccataagtg tcaccatgat aggtgtcgtt ctctttgatt ttgctgccga cttcattgat
                                                                      480
gggcccatca aagcctactt atttgatgtc tgctcccatc aggacaagga gaagggcctc
                                                                      540
cactaccatg ccctcttcac aggttttgga ggtgccctgg gttacctttt gggtgctata
                                                                      600
gactgggccc atctggagct gggaagactg ttgggtacag aattccaggt catgttcttc
                                                                      660
ttetetgeat tggtgeteac tttgtgtttt actgtteate tgtgeagtat etetgaagee
                                                                      720
ccacttacag aggttgcaaa gggcattccc ccacagcaaa cccctcagga ccctccattg
                                                                      780
tcatcagatg gaatgtacga gtatggttct atcgagaaag ttaaaaatgg ttacgtaaat
                                                                      840
ccagagetgg caatgeaggg agcaaaaaac aaaaatcatg etgaacagae tegcagggca
                                                                      900
atgacattaa agtcactget gagagcactg gtgaacatge etecteacta eegetacett
                                                                      960
tgcatcagcc acctcattgg atggacggcc ttcctgtcca acatgctgtt cttcacagat
                                                                     1020
ttcatgggcc agattgtgta ccgcggggat ccctatagtg cacacaactc cacagagttt
                                                                     1080
ctcatctacg aaagaggagt cgaggttgga tgttggggct tctgcatcaa ctccqtqttt
tecteactit attettaett teagaaagtt tiggtateet acatiggatt aaagggtett
                                                                     1200
tacttcacgg gatatttgct gtttggcctg gggacgggat ttattgggct cttcccgaat
                                                                     1260
gtctactcca ccctggtcct gtgcagcctg tttggtgtaa tgtccagcac cctgtacact
                                                                   . 1320
gtgcccttta acctcattac tgagtaccac cgcgaggaag aaaaggagag gcagcaggcc
                                                                     1380
ccaggagggg acccagacaa cagcgtgaga gggaagggca tggactgcgc caccctcaca
                                                                     1440
tgcatggtgc agctggctca gatcctggtc ggaggtggcc tgggctttct ggtcaacaca
                                                                     1500
gccgggaccg ttgtcgtcgt ggtgatcaca gcgtctgcgg tggcactgat aggctgttgc
                                                                     1560
tttgtcgctc tctttgttag atatgtggat
                                                                     1590
```

```
<210> 5021
<211> 1236
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1237)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (95)...(875)
<223> similar to gi1322971 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5021
ctccggtagc actcgggccg gcggacagtg agggcgcgac aacaagggag gtgtcacagt
                                                                       60
tttccattta gatcaacaac ttcaagttct taccatggaa aattccgaga agactgaagt
                                                                      120
                                                                      180
ggtteteett gettgtggtt catteaatee cateaceaae atgeacetea ggttgtttga -
                                                                      240
gctggccaag gactacatga atggaacagg aaggtacaca gttgtcaaag gcatcatctc
tectgttggt gatgeetaca agaagaaagg acteatteet geetateace gggteateat
                                                                      300
ggcagaactt gctaccaaga attctaaatg ggtggaagtt gatacatggg aaagtcttca
                                                                      360
gaaggagtgg aaagagactc tgaaggtgct aagacaccat caagagaaat tggaggctag
                                                                      420
tgactgtgat caccagcaga actcacctac tctagaaagg cctggaagga agaggaagtg
                                                                      480
gactgaaaca caagattota gtoaaaagaa atoootagag ocaaaaacaa aagotgtgoo
                                                                      540
aaaggtcaag ctgctgtgtg gggcagattt attggagtcc tttgctgttc ccaatttgtg
                                                                      600
gaagagtgaa gacatcaccc aaatcgtggc caactatggg ctcatatgtg ttactcgggc
                                                                      660
tggaaatgat gctcagaagt ttatctatga atcggatgtg ctgtggaaac accggagcaa
                                                                      720
cattcacgtg gtgaatgaat ggatcgctaa tgacatctca tccacaaaaa tccggagagc
                                                                      780
cctcagaagg ggccagagca ttcgctactt ggtaccagat cttgtccaag aatacattga
                                                                      840
aaagcataat ttgtacagct ctgagagtga agacaggaat gctggggtca tcctggcccc
                                                                      900
tttgcagaga aacactgcag aagctaagac ataggaatte tacagcatga tatttcagac
                                                                      960
ttcccatttg gggatctgaa acaatctggg agttaataac tggggaaaga agttgtgatc
                                                                     1020
tgttgcctaa actaaagctt aaaagtttag taaaaatcgt ctgggcacag tggctcacgc
                                                                     1080
ctgtagtece ageaetttgg gaggetgagg egggtggate geggggteag gagategaga
                                                                     1140
ccatcctggc caatatggtg aagccccatc tctactgaaa atacanaaat tggctgtgtg
                                                                     1200
tggggcacgt gcctgtggtc ccagctgctt ggnggg
                                                                     1236
```

```
<210> 5022
<211> 2902
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1887)
<223> similar to gi4240239 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<400> 5022 gatggcggcg gcagcagtcg acagcgcgat ggaggtggtg ccggcgctgg cggaggaggc 60 cgcgccggag gtagcgggcc tcagctgcct cgtcaacctg ccgggtgagg tgctggagta 120 catcetgtgc tgeggetege tgacggeege egacategge egtgteteca geacetgeeg 180 geggetgege gagetgtgee agageagegg gaaggtgtgg aaggageagt teegggtgag 240 gtggccttcc cttatgaaac actacagccc caccgactac gtcaattggt tggaagagta 300 taaagttcgg caaaaagctg ggttagaagc gcggaagatt gtagcctcgt tctcaaagag 360 gttettttea gageaegtte ettgtaatgg etteagtgae attgagaace ttgaaggaee 420 agagattttt tttgaggatg aactggtgtg tatcctaaat atggaaggaa gaaaagcttt 480 gacctggaaa tactacgcaa aaaaaattct ttactacctg cggcaacaga agatcttaaa 540 taatettaag geetttette ageageeaga tgaetatgag tegtatettg aaggtgetgt 600 atatattgac cagtactgca atcetetete egacateage etcaaagaca tecaggeeca 660

```
aattgacagc atcgtggagc ttgtttgcaa aacccttcgg ggcataaaca gtcgccaccc
                                                                    720
cagettggee tteaaggeag gtgaateate catgataatg gaaatagaae tecagageea
                                                                    780
ggtgctggat gccatgaact atgtccttta cgaccaactg aagttcaagg ggaatcgaat
                                                                    840
ggattactat aatgccctca acttatatat gcatcaggtt ttgattcgca gaacaggaat
                                                                    900
cccaatcage atgtetetge tetatttgac aattgetegg cagttgggag teccaetgga
                                                                    960
gcctgtcaac ttcccaagtc acttcttatt aaggtggtgc caaggcgcag aaggggcgac
                                                                   1020
cctggacatc tttgactaca tctacataga tgcttttggg aaaggcaagc agctgacagt
                                                                   1080
gaaagaatgc gagtacttga tcggccagca cgtgactgca gcactgtatg gggtggtcaa
                                                                   1140
tgtcaagaag gtgttacaga gaatggtggg aaacctgtta agcctgggga agcgggaagg
                                                                   1200
                                                                   1260
categaceag teataceage teetgagaga etegetggat etetatetgg caatgtacee
ggaccaggtg cagettetee teetecaage caggetttae tteeacetgg gaatetggee
                                                                   1320
agagaagtet ttetgtettg ttttgaaggt gettgacate etecageaca tecaaaceet
                                                                   1380
agacccgggg cagcacgggg cggtgggcta cctggtgcag cacactctag agcacattga
                                                                   1440
gcgcaaaaag gaggaggtgg gcgtagaggt gaagctgcgc tccgatgaga agcacagaga
                                                                   1500
tgtctgctac tccatcgggc tcattatgaa gcataagagg tatgqctata actqtqtqat
ctacggctgg gaccccacct gcatgatggg acacgagtgg atccggaaca tgaacgtcca
                                                                   1620
cagcetgeeg caeggeeace accageettt ctataaegtg etggtggagg aeggeteetg
                                                                   1680
tegataegea geecaagaaa aettggaata taaegtggag eetcaagaaa tetcacaece
                                                                   1740
tgacgtggga cgctatttct cagagtttac tggcactcac tacatcccaa acgcagagct
                                                                   1800
ggagatccgg tatccagaag atctggagtt tgtctatgaa acggtgcaga atatttacag
                                                                   1860
tgcaaagaaa gagaacatag atgagtaaag tctagagagg acattgcacc tttgctgctg
                                                                   1920
ctgctatctt ccaagagaac gggactccgg aagaagacgt ctccacggag ccctcgggac
                                                                   1980
ctgctgcacc aggaaagcca ctccaccagt agtgctggtt gcctcctact aagtttaaat
                                                                   2040
accepted cttccccage tecaaagaca atettectct ccecctacac tagteaatta
                                                                   2100
atotgaaagg cactgtgtca gtggcatggc ttgtatgctt gtcctgtqqt qacaqtttqt
                                                                   2160
gacattetgt etteatgagg teteacagte gacgeteetg taateattet ttgtatteac
                                                                   2220
tecatteece tgtetgtetg catttgtete agaacattte ettggetgga cagatggggt
                                                                   2280
tatgcatttg caataatttc cttctgattt ctctgtqqaa cqtqttcqqt cccqaqtqaq
gactgtgtgt ctttttaccc tgaagttagt tgcatattca gaggtaaagt tgtgtgctat
                                                                   2400
cttggcagca tcttagagat ggagacatta acaagctaat ggtaattaga atcatttgaa
                                                                   2460
tttattttt tctaatatgt gaaacacaga tttcaagtgt tttatctttt ttttttaaat
                                                                   2520
ttaaatggga atataacaca gttttccctt ccatattcct ctcttgagtt tatgcacatc
                                                                   2580
tctataaatc attagttttc tattttatta cataaaattc ttttagaaaa tgcaaatagt
                                                                   2640
gaactttgtg aatggatttt tecatactea tetacaatte etecatttta aatgaetaet
                                                                   2700
tttatttttt aatttaaaaa atctacttca gtatcatgag taggtcttac atcagtgatg
                                                                   2760
ggttcttttt gtagtgagac atacaaatct gatgttaatg tttgctctta gaagtcatac
                                                                   2820
2880
ttaatgaacc ttaaaaaaaa aa
                                                                   2902
```

```
<210> 5023
<211> 1113
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (984)...(564)
<223> similar to gi1913888 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5023 agttgcgggg atttttataa caccatatat ggatatatat ggctatattt ttgcttatcg 60 ttcattgcct cagcgataaa gggaaataaa aatattgatc tataaaataa gccgatgata 120 180 acacaatgcc aaaaaatagc ttatggttaa agtgccaagg gggtgaaggc ttgaaagcaa 240 ttcttggaaa tatggcttct catttttagg tttacttttg gaaaaactac tctatataca 300 catatccagg ttgtaacact tggacagtag cattatgggg catgatataa ctttggtaca 360 420 cattgcagat atggatgttt aatgtctgta aatgatattc cttcaccagt tagacttctg 480 tacatccagg tgaccagcca cctggttcta agtcatatcc caccagaatc cctggagtcc ttgccagage catcagagae agcaggegaa agcaggetea etgaateeat attgtgttte 540 ctctctcggt tctcctgggt tccactgtca gttctccaaa cgtggaaaaa aactgctcca 600 660 tttctttctg tagcatgica tttcttttct cggcatcttc ttttgctcgc tcggcatttc 720 quatttttat ttctatcatt gtgaactttt tcctctcctg atccagttca tcatggaggc 780 tcatcatttc tgtttccaaa gtcaagtttc gctgttctaa gctctttatc ctggactcat 840 actictation of the control of the co tgtggttgct gctgctgttg cccacaaatg tctcactgtt gtcactgcta ctggtggcac 900 960 gactacttcg acctcccaca ctcctgtggt cacttttgct ttcatagtcc ctggggtggg gaaaggtegt cetgeggggg cecatecaaa acagggteet caaagtteee cecaaaaaaag 1020 tettgetetg ggeaggtggt ggtagaagag egacaggagt tggagttete agggagggag 1080 atttcacagg aggaagtgga ccaggtagca ctg 1113

```
<210> 5024
<211> 1937
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (225)...(1064)
<223> similar to gi5824388 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5024
                                                                   60
aaggagccaa gaccatggcg aaagccgggg ataagagcgg cagcagcggg aagaaaagtc
                                                                  120
taaaacggaa agccgctgcc gaagaacttc aggaggctgc aggcgctggg gatggggcga
eggaaaaegg ggteeaaece eegaaagegg etgeetttee geeaggettt ageatttegg
                                                                  180
agattaaaaa caaacagcgg cgacacttaa tgttcacgcg gtggaaacag cagcagcgga
                                                                  240
                                                                  300
aggaaaagtt ggcagctaag aaaaaactta aaaaagaaag agaggctctt ggcgataagg
ctccaccaaa gcctgtaccc aagaccattg acaaccagcg agtgtatgat gaaaccacag
                                                                  360
                                                                  420
tagaccctaa tgatgaagag gtcgcttatg atgaagctac agatgaattt gcttcttact
tcaacaaaca gacttctccc aagattctca tcacaacatc agatagacct catgggagaa
                                                                  480
cagtacgact ctgtgaacag ctctccacag ttataccaaa ctcacatgtt tattacagaa
                                                                  540
                                                                  600
gaggactggc tctgaaaaaa attattccac agtgcatcgc aagagatttc acagacctga
                                                                  660
ttgttattaa tgaagategt aaaaccccaa atggacttat tttgagtcac ttgccaaatg
720
                                                                  780
gcaaggaccc cacagaacac atacctgaaa taattctgaa taattttaca acacggctgg
gteatteaat tggaegtatg tttgeatete tettteetea taateeteaa tttateggaa
                                                                  840
ggcaggttgc cacattccac aatcaacggg attacatatt cttcagattt cacagataca
                                                                  900
tattcaggag tgaaaagaaa gtgggaattc aggaacttgg accacgtttt accttaaaat
                                                                  960
taaggtctct tcagaaagga acctttgatt ctaaatatgg agagtatgaa tgggtccata
                                                                 1020
```

```
agccccggga aatggataca agtagaagaa aattccattt ataaagtact gagagaatga
                                                                     1080
tattggattt tgctgaacag gcctatcttg aactttggta aattattttt gacagaatac
                                                                     1140
tetttteaaa atggeatttg etgattteat aaacetttea egtetggaeg aattaceaaa
                                                                     1200
tgccatgaat tgccactgtg tgtttatgta gaaaatacaa ataaaagtta ttttgatggc
                                                                     1260
ttaggtttcc ttaaacttag ttctcttgtt tttgggtaac tgtgaataat taagttggaa
                                                                     1320
tcaagattca gattaacttt cctatttgca tagaacacat gagaggaata aaatggttgg
                                                                     1380
taaatattgg ctaaccettg attittatac cagattaacc ttggattccc agtgtctggc
                                                                     1440
acagttttaa tagettaaat ggaggeeagg tttetggatg ttttaaeatt etettaagee
                                                                     1500
ttcagaaggg taaaaaattt aaagcaaaat gatctaccag ggtttaaagc aaagttgcaa
                                                                     1560
attactgaag ctaatctttg cttcctgatt ttgaggtttt tggttttttg tgcccacgtt
                                                                     1620
gtggggaget ettttttace teattacatg gtgetgtagt acteceatte aggeactgaa
                                                                     1680
aacaaagtta accctataag taactcatgg atggaaaccc gtagaactta acagcctcct
                                                                     1740
cctgacctta aaagaataaa ggttcacagt ttacctttaa ttccctagca gtcttgccag
                                                                     1800
atgtatggca taaagtcatg tgagaagagt aggtggaaaa aactgtacaa acttaacccc
                                                                     1860
ttcaggtgtt cagaacagat taatatacca tgtatttaat accaataata atgcaaaata
                                                                     1920
aaacgtttca tactaag
                                                                     1937
```

```
<210> 5025
<211> 2685
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(1666)

<223> similar to gi2208839 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5025
gcggccgcgg cggcggctgg ggcgttcgcg ggccggcgcg cggcgtgcgg ggccgtgctg
                                                                       60
ctgacggagc tgctggagcg cgccgctttc tacggcatca cgtccaacct ggtgctattc
                                                                      120
ctgaacgggg cgccgttctg ctgggagggc gcgcaggcca gcgaggcgct gctgctcttc
                                                                      180
atgggcetca cetacetggg etegeegtte ggaggetgge tggeegaege geggetggge
                                                                      240
egggegegeg ceatectget gageetggeg etetacetge tgggeatget ggeetteeeg
                                                                      300
etgetggeeg egeeegeeae gegageegeg etetgeggtt eegegegeet geteaaetge
                                                                      360
acggcgcctg gtcccgacgc cgccgcccgc tgctgctcac cggccacctt cgcggggctg
                                                                      420
gtgctggtgg gcctgggcgt ggccaccgtc aaggccaaca tcacgccctt cggcgccgac
                                                                      480
caggitaaag atcgaggicc ggaagccact aggagatitt ttaattggit ttattggagc
                                                                      540
attaacctgg gagcgatcct gtcgttaggt ggcattgcct atattcagca gaacgtcagc
                                                                      600
tttgtcactg gttatgcgat ccccactgtc tgcgtcggcc ttgcttttgt ggtcttcctc
                                                                      660
tgtggccaga gcgttttcat caccaagcct cctgatggca gtgccttcac cgacatgttc
                                                                      720
aagatactga cgtattcctg ctgttcccag aagcgaagtg gagagcgcca gagtaatggt
                                                                      780
gaaggcattg gagtctttca gcaatcttct aaacaaagtc tgtttgattc atgtaagatg
                                                                      840
tctcatggtg ggccatttac agaagagaaa gtggaagatg tgaaagctct ggtcaagatt
                                                                      900
gtccctgttt tcttggcttt gataccttac tggacagtgt atttccaaat gcagacaaca
                                                                      960
tatgttttac agagtettea tttgaggatt ccagaaattt caaatattac aaccactect
                                                                     1020
cacacgetee etgeageetg getgaceatg tttgatgetg tgeteateet cetgeteate
                                                                     1080
cctctgaagg acaaactggt cgatcccatt ttgagaagac atggcctgct cccatcctcc
                                                                     1140
ctgaagagga tcgccgtggg catgttcttt gtcatgtgct cggcctttgc tgcaggaatt
                                                                     1200
ttggagagta aaaggctgaa ccttgttaaa gagaaaacca ttaatcagac catcggcaac
                                                                     1260
```

```
gtcgtctacc atgctgccga tctgtcgctg tggtggcagg tgccgcagta cttgctgatt
                                                                     1320
gggatcagcg agatctttgc aagtatcgca ggcctggaat ttgcatactc agctgccccc
                                                                     1380
aagtecatge agagtgecat aatgggettg ttetttttet tetetggegt egggtegtte
                                                                     1440
gtgggttctg gactgctggc actggtgtct atcaaagcca tcggatggat gagcagtcac
                                                                     1500
acagactttg gtaatattaa cggctgctat ttgaactatt acttttttct tctggctgct
                                                                     1560
attcaaggag ctaccctcct gcttttcctc attatttctg tgaaatatga ccatcatcga
                                                                     1620
gaccatcage gatcaagage caatggegtg eccaecagea ggagggeetg acetteetga
                                                                     1680
ggccatgtgc ggtttctgag gctgacatgt cagtaactga ctggggtgca ctgagaacag
                                                                     1740
                                                                     1800
gcaagacttt aaattcccat aaaatgtctg acttcactga aacttgcatg ttgcctggat
tgatttette ttteeeteta teeaaaggag ettggtaagt geettaetge agegtgtete
                                                                     1860
ctggcacgct gggccctccg ggaggagagc tgcagatttc gagtatgtcg cttgtcattc
                                                                     1920
aaggtetetg tgaateetet agetgggtte cettttttae agaaaeteae aaatggagat
                                                                     1980
tgcaaagtet tggggaacte caegtgttag ttggcatece agtttettaa acaaatagta
                                                                     2040
tcacctgctt cccatagcca tatctcactg taaaaaaaaa aattaataaa ctgttactta
                                                                     2100
tatttaagaa agggaggatt ttttttttt aaagataaaa gcatggtcag atgctgcaag
                                                                     2160
gattttacat aaaggccata tttatggttt ccttcctgaa aacagtcttg ctcttgccat
                                                                     2220
gttctttgat ttaggctggt agtaaacaca tttcatctgc tgcttcaaaa agtacttact
                                                                     2280
ttttaaacca tcaacattac ttttctttct taaggcaagg catgcataag agtcatttga
                                                                     2340
gaccatgtgt cccatctcaa gccacagagc aactcacggg gtacttcaca ccttacctag
                                                                     2400
tcagagtgct tatatatagc tttattttgg tacgattgag actaaagact gatcatggtt
                                                                     2460
gtatgtaagg aaaacattct tttgaacaga aatagtgtaa ttaaaaataa ttgaaagtgt
                                                                     2520
taaatgtgaa cttgagctgt ttgaccagtc acatttttgt attgttactg tacgtgtatc
                                                                     2580
tggggcttct ccgtttgtta atactttttc tgtatttgtt gctgtatttt tggcataact
                                                                     2640
ttattataaa aagcatctca aatgcgaaat ccatgaaaaa aaaaa
                                                                     2685
```

```
<210> 5026
<211> 4955
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2859)
<223> similar to gi5689511 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5026
ctctctctt ttcgggcgga gtcgcccacc actgccagcc cagcgctggg gggacctgct
                                                                       60
ccaggetgta geegeaggae eccaeeace eccatggete ecetggeett ggtgggggte
                                                                      120
acactectee tggeggetee eccatgetee ggggeageea ecceaaceee etecetgeeg
                                                                      180
ceteceegg ccaatgacag egacaceage acaggggget gecaggggte etacegetge
                                                                      240
cagccggggg tgctgctgcc cgtgtgggag cccgacgacc cgtcgctggg tgacaaggcg
                                                                      300
gcacgggcag tggtgtactt tgtggccatg gtctacatgt ttctgggagt gtccatcatc
                                                                      360
gccgaccgtt tcatggcggc catcgaggtc atcacgtcaa aagagaagga gatcaccatc
                                                                      420
accaaggeca acggtgagac cagegtggge accgttegea tetggaatga gaeggtgtee
                                                                      480
aacctcacgc tcatggccct gggctcctcc gcacctgaga tcctgctgtc agtcatcgaa
                                                                      540
gtctgcggcc acaacttcca ggcgggtgag ctgggcccag gcaccatcgt gggcagcgct
                                                                      600
gccttcaaca tgtttgtggt catcgccgtg tgcatctacg tcatcccagc cggcgagagc
                                                                      660
egeaagatea ageacetgag agtettettt gteaetgeet ettggageat ettegeetat
                                                                      720
gtctggcttt atctcatcct tgctgttttt tcccccggtg tggtccaggt gtgggaggcg
                                                                      780
```

```
etgetgacce tggtettett eccggtgtge gtggtatteg ectggatgge egacaagegg
                                                                     840
etgetettet acaagtaegt gtacaagege tacegeaceg acceaegeag eggeateate
                                                                     900
ataggegeeg agggegaeee ceegaagage ategagetgg aeggeaegtt egtgggegee
                                                                     960
gaggccccag gtgagctggg cggcctgggc ccgggccccg ccgaggcgcg cgagctggac
                                                                    1020
gccagccgcc,gcgaggtcat ccagatcctc aaggacctca agcagaagca cccggacaag
                                                                    1080
gatetggage agetggtggg categeeaac taetaegege tgetgeacea geagaagage
                                                                    1140
egegeettet acegeateea ggeeaegegg etgatgaceg gegeegggaa egtgetgege
                                                                    1200
agacacgcgg cggacgcctc gcgcagggcg gcgccggccg agggcgcggg cgaggacgaa
                                                                    1260
gacgacggcg ccagccgcat cttcttcgag cctagcctct accactgcct ggagaactgc
                                                                    1320
ggctccgtgc tgctgtccgt cacgtgccag ggcggcgagg gcaacagcac cttctacgtg
                                                                    1380
gactacegea etgaggaegg etetgeeaag gegggeteeg actacgagta eagegaggge
                                                                    1440
acgctggtgt tcaaaccagg cgagacgcag aaggagctgc gcatcggcat catcgacgac
                                                                    1500
gacatetteg aggaggaega geatttette gtgeggetge tgaacetgeg egtgggegae
                                                                    1560
gcgcagggca tgttcgagcc ggacggcggc gggcggccca aggggcggct ggtggcgccg
                                                                    1620
etgetggeea cegteaceat cetggaegae gaccaegeag geatettete ettecaggae
                                                                    1680
cgcctgctgc acgtgagcga gtgcatgggc accgtggacg tgcgcgtcgt gcgcagctcg
                                                                    1740
1800
ggcgtgcact acgaggacgc gtgcggagag ctggagtttg gcgacgacga gaccatgaaa
                                                                    1860
acticticagg tgaagatagt tgatgacgag gaatatgaga aaaaggataa tttcttcatt
                                                                    1920
gagetgggee agececagtg gettaagega gggattteag etetgetaet caateaaggg
                                                                    1980
gatggggaca ggaagctaac agccgaggag gaggaggctc ggaggatagc agagatgggc
                                                                    2040
aagccagttc ttggggagaa ctgccggctg gaggtcatca tcgaggagtc atatgatttt
                                                                    2100
aagaacacgg tggataaact catcaagaaa acgaacttgg ccttggtaat tgggacccat
                                                                    2160
tcatggaggg agcagttttt agaggcaatt acggtgagcg cagggggacga ggaggaggag
                                                                    2220
gaggacgggt cccgggagga gcggctgccg tcgtgctttg actacgtgat gcacttcctg
                                                                    2280
acggtgttct ggaaggtgct cttcgcctgt gtgcccccca ccgagtactg ccacggctgg
                                                                    2340
gcctgctttg gtgtctccat cctggtcatc ggcctgctca ccgccctcat tggggacctc
                                                                    2400
gesteecast teggetgeas egitggests aaggastetg teaatgetgt tgtettegtt
                                                                    2460
gccctgggca cctccatccc tgacacgttc gccagcaagg tggcggcgct gcaggaccag
                                                                    2520
tgcgccgacg cgtccatcgg caacgtgacc ggctccaacg cggtgaacgt gttccttggc
                                                                    2580
ctgggcgtcg cctggtctgt ggccgccgtg tactgggcgg tgcagggccg ccccttcgag
                                                                    2640
gtgcgcactg gcacgctggc cttctccgtc acgctcttca ccgtcttcgc cttcgtgggc
                                                                    2700
attgccgtgc tgctgtaccg gcgccggccg cacatcggcg gcgagctggg cggcccgcgc
                                                                    2760
ggacccaage tegecaccae egegetette etgggeetet ggeteetgta catectette
                                                                    2820
gccagcctgg aggcgtactg ccacatccgg ggcttctagg gcctcgcgca gagactcgtc
                                                                    2880
cccaccgccc gcccggggct agggactcgg ctgcacctgc tcttggaccc tggtctcctt
                                                                    2940
ttcccccag acteggeete ctetectggg acteggeete cetteteege ecceteceet
                                                                    3000
ggetttgatt geceetgtte tgtgteecea gtageteage etteeetett eeteteggga
                                                                    3060
gcctccccgg ttcctcccct gcggtgaccc caactccagc ccatcctgtt ggtgaccgtc
                                                                    3120
tatatecetg gggaaattte caceceagte ceetececag ggaaceacee ceagtaacea
                                                                    3180
tectggggag tttaaggtet eteteettgg teacceagee tggetttgee eccaaagtet
                                                                    3240
cccttcccct agtgaccccc ccccacttca ccccatgtcc cagagcctca gaacccaccc
                                                                    3300
tecetggggg accetegaag gaggetgtea gaggeegtet teagettace agecetteee
                                                                    3360
cccagecete agggagetee geteaggeee eggegggagg gagegggtgg gtgtgegee
                                                                    3420
aaggaggeeg cacacettte ettecaatee etceaetegg gttettggga ggacaeteat
                                                                    3480
tctccaggct cggagacgag gggagaagtt tggggtttca gtcccagggc ttagccggag
                                                                    3540
gaagcacatt ttgaacctgc aacttcagac attccagetc ceceaetege ectecaetae
                                                                    3600
ctctgagagc ccagccacgc cttggaggga ggggcttggg tgtgtatata gtgtgtttgg
                                                                    3660
999aggggg accegggagg gtgcatgtct tgggaaaagg gggggacaga caacttttga
                                                                    3720
gagggcagca gactccctca gccatgagaa ccagctttgg ggaggaggcc gggaatcaaa
                                                                    3780
gcgagtccag ttgatctccc ctgacaatct ggaaggttca ttttgccctc agtgccagcc
                                                                    3840
aatccgggca ggaccctcga agaggagacc gagggtccca gaggaccaat qctacaaqcc
                                                                    3900
agcaaatgct gccacatctc tgccctgatg ggggtggga aatgggtggg gggatgggac
                                                                    3960
tgggcccaag ggatctgggt gggcattttt aactttggag gccttccatc tgtcggtagg
                                                                    4020
ccatctgcat titicttactg tigatgtitic ctgcccaaag gacacattig ggcagtgcca
                                                                    4080
cccactcctt gggcccctag gatgacccaa ctacccccat aactttctgc ttcccacagg
                                                                    4140
ttttcagcat tctatcgtcc tgttgtgctc agccccaaca tcccagaccc gttacccact
                                                                    4200
```

```
accettetet eccecagete ateateagte getgtetett ttetgtgatt tetgtaaaag
                                                                     4260
ttgccataaa actttgaaat tctgcctgaa aaacagtccc gtgggaagct gggattcagg
                                                                     4320
aggaggggc taataaggtc tetgactgag atttgggcaa etgttaaacc aagtaatetg
                                                                     4380
ggtttttgog gcccgcggtc gtctgcggga cacacccaca tatagcagca gcgccggggt
                                                                     4440
ccagccgcca agetetteca etegecaege ecceateagt aatgagettt caetagecae
                                                                     4500
geocecatee gteagectag etettecaet agecaeece ceatecatea gteatggget
                                                                     4560
tecacaagee aegeacetee actetecatg ecceeattgg teagtegtgg gtttecacta
                                                                     4620
accacgcccc cattcatcag ccaagetect ccaettgeta egecegeate egteaattac
                                                                     4680
gggtttccac taaccacgcc cccattcatc agcctagctc ttccactaat cacaccccca
                                                                     4740
cttatcagtc gtgcttcagc cacgccttcc tgcttcagtc aggggcttcc actagccacg
                                                                     4800
cccccatgca tgagccacaa actgtttctc tttatgggca tcctgggaac acaaaaqaqa
                                                                     4860
gacgttcatt tgcctgagcc aaagagctgg ggttgatggg gtttcctaaa taaagcaagt
                                                                     4920
aattttctca gatcctagaa aaaaagcaaa aaaag
                                                                     4955
```

```
<210> 5027
<211> 900
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(898)
<223> similar to gi3548791 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5027
atggettetg etgeetgete catggaecce ategacaget ttgageteet ggateteetg
                                                                       60
tttgaccggc aggacggcat cetgagacac gtggagetgg gegagggetg gggteaegte
                                                                      120
aaggaccagg teetgecaaa eeeegactet gacgacttee teageteeat eetgggetet
                                                                      180
ggagactcac tgcccagctc cccactctgg tcccccgaag gcagtgatag tggcatctcc
                                                                      240
gaagacetee cetecgacee ceaggacace cetecacgea geggaceage caceteceee
                                                                      300
gccggctgcc atcctgccca gcctggcaag gggccctgcc tctcctatca tcctggcaac
                                                                      360
tettgeteca ceacaacee agggecagtg atecaacaac ageateacet gggggeetee
                                                                      420
tacctcctgc gacctggggc tgggcactgt caggagctgg tgctcaccga ggatgagaag
                                                                      480
aagctgctgg ctaaagaagg catcaccctg cccactcagc tgcccctcac taagtacgag
                                                                      540
gagcgagtgc tgaaaaaaat ccgccggaaa atccggaaca agcagtcggc gcaagaaagc
                                                                      600
aggaagaaga agaaggaata tatcgatggc ctggagactc ggtcctgttg ctgtcctttg
                                                                      660
eceteateat ecteeetee ateageeett ttggeeecaa caaaacegag ageeetgggg
                                                                      720
actitgcgcc tgtacgagtg ttctccagaa ctttgcacaa cgatgctgcc tcccgcgtgg
                                                                      780
ctgctgatgc tgtgccaggc tccgaggccc caggaccccg acccgaggct gacacaaccc
                                                                      840
gagaagagte tecaggaage eeeggggeag aetggggett eeaggaeace gegaaeetga
                                                                      900
```

```
<210> 5028
<211> 683
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (41)...(109)
<223> similar to gil62191 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5028 tttcgtcaga gctgcgcgtg ctgctttgcc cgagcccgag cccgagcccg agcccgagcc 60 cgagcccgag cccgagcccg agcccgaacg caagcctggg agcgcggagc ccggctaggg 120 actoctecta tttatggage aggeacecaa catggetgag ceeeggggee eegtagaeea 180 tggagtccag attcgcttca tcacagagcc agtgagtggt gcagagatgg gcactctacg 240 tegaggtgga egaegeceag etaaggatge aagagecagt acetaegggg ttgetgtgeg 300 tgtgcaggga atcgctgggc agccctttgt ggtgctcaac agtggggaga aaggcggtga 360 ctcctttggg gtccaaatca agggggccaa tgaccaaggg gcctcaggag ctctgagctc 420 agatttggaa ctccctgaga acccctactc tcaggtcaag ggatttcctg cccctcgca 480 gagcagcaca tetgatgagg agcetgggge etactggaat ggaaagetac teegtteeca 540 600 ctcccaggcc tcactggcag gccctggccc agtggatcct agtaacagaa gcaacagcat getggageta geceegaaag tggetteece aggtageace attgacaetg etceeetgte 660 ttcagtggac tcactcatca aca 683

```
<210> 5029
<211> 4235
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4236)...(940)
<223> similar to gi5689527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5029
tttgaacact gcaaaaggct tttattttat aggcaccact gcaaaatgag qaatcacatc
                                                                       60
aaaacatatc aaatagaaaa taataattta ttttaacttc attttactgt ttgtaactaa
                                                                      120
tcatgatttt gtgaacttgc ctgtataagt ctgtaccttc aaatctacaa agcaaaagtt
                                                                      180
tactacaatg agcacttaaa attccacaaa ccgtctccat ccacaacttt cctgtacatg
                                                                      240
caaattettt cagtgggetg caatatttge aaacatgett taaaetteca taaagatgea
                                                                      300
agatattttg ctttctgcta aaacctttac actctcttgg gaaccttaac caggaaaatg
                                                                      360
tttaaatgta tatcccaact ctaaacgctg ccggtttggt tatatgtatt aaatcgttaa
                                                                      420
ccaccgggtt gggtggtttt gagttgaaac cttcacctaa atgataatat cttaacggtc
                                                                      480
acgcatatga aacacattca gtaacgtacc attataaaat agggttccat taaaaataca
                                                                      540
tactggcagt tgtatttgtg ttttaggcag gaaaaaaagc gtgtttaact tttttatatg
                                                                      600
aatatagttt aaacaagtta ttotgtgaaa gtatgottaa taaaagatot ttotgaaatt
                                                                      660
taaacacttt atgtaaaagg gtacaggtag aaaagtacaa ttgctatttg aaaaaagctc
                                                                      720
tgtttgttaa tattgeette caagatagta agggtgtttt tetetetett eeettaaaat
                                                                      780
agacctatga cacccagagt tgtagggttt gcaaatttgg actataaaca tqaaqaccqt
                                                                      840
```

```
900
 acttatetta tatacaaaaa ettgeegeat tgaacgagge aggaatttet acceeagtgg
 tagtggtctc ctttatgtac ataatgcaga agtgaaaatt atacagtagt caccgatagg
                                                                       960
                                                                      1020
 aaggaattqt atactctagt geegteeggg gattttgtge egtgggttaa gagttettgg
                                                                      1080
 atogtoatco agitatogaa gattitotta tiootottot toatcatott titigiggoto
 agttcgagaa tgttcatctc cttcctgtca tcggctgctt gctgctcctt gagacaatcc
                                                                      1140
 aacctgctct gcatcatgaa ctcgcgccgc cgccgctgct ccttggcctt caccaggtgc
                                                                      1200
                                                                      1260
 tgcttcctct cctccttgct ccagtagege cccatcttca tctcgctcac egegtegteg
 teggtggtea tgeegetgeg etetteeegg atetteaggg egegeteeeg cageaggegg
                                                                      1320
 tecegeaegg geetettggt gatgtagege gtecegtege tgeggatett cacettecae
                                                                      1380
                                                                      1440
 tecatgegeg geteegaegg ggtgggagag eteaggteet tgeacatget eaceaggete
 atotggottt gegegtacte caeggeegae ttetgetgga teagetgeat gtagetetgg
                                                                      1500
 tagtgctggg cgtgcgccgg gatgtgcgcg tgcttgtatg gggagtggtg ataggagggc
                                                                      1560
 aggtaggege tgeceagett etggetggge gtggggetee ggeteeegte getggetete
                                                                      1620
 egetetttge tttccagggg etggttgggg tecageteet teagggaegg getataggta
                                                                      1680
 ggggtgccca cttcgggatc ttccgtgatg gagagcagat tcttggaggc tggcccgtag
                                                                      1740
                                                                      1800
 getteegtgg teeceacage ceettegetg etegggeage tgatgeeete egeegetete
 ctcaaggagt tgtcggggga gatctccagg gtgagcgggg tgctgcggca gctctcgcct
                                                                      1860
 gtgttgtagg cgctcgagct gtccttgtcg gatttctccg ggagctcggt gatatctgag
                                                                      1920
 agetegtgte tgegeaegte gatgetggtg ttgtagttge ggaageeget gttgtgeage
                                                                      1980
 atccaggact cgcggtactg ctccttgagc tgctgcatct tgtgggcgcg cacqatgctc
                                                                      2040
 aggeacteea getegatget gegeagetet tegtteagea geteeagete ettgteeaeg
                                                                      2100
 ctetcagggt caetettgee ggegteeagg gggeegetag ggtagtaeag geegtaaggg
                                                                      2160
 gtggcgctct tcacctggca cttgagctcc aggagctcgc ggaagcgctc gcactcgtcc
                                                                      2220
 acceggatec ccaggtagge ggegecegtg cactegggeg aaatgaacga ettgttgetg
                                                                      2280
 aagggcaggt cgccgctgcc caaggtgtcc tggctgcagg tgagcttcct ctgccccgcc
                                                                      2340
 agegggttgg aggatgeggt ggegtegteg ceattgttet ettgeteega getetegtea
                                                                      2400
 ttacgggtgc tetegteggt cegececaca cegetgteet tetegtgetg gttggacaag
                                                                      2460
 atggtggctg tatctgtggt cocaccgtct togtcgtgct tottctgctg cagcacgcta
                                                                      2520
getgtgaatt geatggeetg gtggtgetge teeteeagea tgteeatgtg eaggteatee
                                                                      2580
 agaaagtegt teetgteate atecateeag ceeteateea getggagtte agecettgea
                                                                      2640
 atcagcaatg aaaagttttt attttcttca ctggttagaa gagccacagc ctcttcacgg
                                                                      2700
 ttctgcacct ctatcccatt aatctggata atgcggtctc cttctcggat gcgcccatcc
                                                                      2760
 ttggctgcaa tgctgttagg gtcaatctca ctgatataaa tcccaatgtc gtcttcatcg
                                                                      2820
 teegteeggt ageacacagt gaggeecage ttgteetgge tgtteattet gtagaggtee
                                                                      2880.
 acttecteca getecagete etecetgtee atetectgat ggatgtetee aatgtagtea
                                                                      2940
 tttggatcgt agtattcatg ggctgaggga tgctcctctg gcaagagata gggatccagc
                                                                      3000
 acgggtgggc tgggagagga catcttagtg agggccatga tatgttcaaa ggtgatgtcg
                                                                      3060
 gtttgggttc ccgtgtccac cagctgagac tctgatggag gcgtgaacat tttggtcctt
                                                                      3120
 ggtgttcttc tcaacacctg caccactatg ggctccttgg ctgtcttgaa agcttccaca
                                                                      3180
 gcctggtcat gagttgctct ggataagtct ctgccgttga cctcaataat cctgtcatga
                                                                      3240
 atttgcaggc ctccttcctt ggctgcaggc ccactgtcaa ctatcttgga tacaaagatt
                                                                      3300
 cetteactgg atgatecate gtggttatee acacteggee ggecaceaat aatattgaat
                                                                      3360
 eccagggage eggagteeeg atgeaggaea agagteagae ttttggttte ttegeeettg
                                                                      3420
 ccgccgggcg gcgcggccac gcagcggctg agcgagtcga ggcgcgcgct gtattcggtg
                                                                      3480
 aatttettet ggtagegeag egeggteate tgeageteaa getgegeege ggeeagetgg
                                                                      3540
 gccaccagcg acttctcgcg cttcccagcg cgcagcgcct ccttcttgag cqccttqtqc
                                                                      3600 -
 agegegeeca ggegggeetg gagegeeeg ttgtgegeee geagegeteg egegeageag
                                                                      3660
 tggccgcccg cgcgctgctc gccgtgcgtc aagggtagcc cgcagccctc ctggcagcgg
                                                                      3720
 eccactggcc gegegtegea egegtegege atgtgegeet ccaegtegeg eegeageage
                                                                      3780
 acctggccgc aacccgcgtg gcgacagcgc gcgggcgcga agtcgcagcg ctcgaggtgc
                                                                      3840
 teeggeaget getgeagett gaccaecegg eegeageege gegtegegta egegeaettg
                                                                      3900
 atgtccagct tgaggataag gcgcttgagc ggcaggacgt ggttgagctc tttggccgac
                                                                      3960
 aggcgaccgc ggcagcgcc cgggcagctg ccctcctgca ccacccaggg cagcacgcag
                                                                      4020
 ccggcgcaga agacgtggcc gcacggcgtg gtcagcgggt cctccaggac cttgtggcac
                                                                      4080
 agegegeact teaggteegg gtecaegteg cegtegaage ggtecagete gaageceatg
                                                                      4140
 gtggcggcca ggccccgggg tcgccgccgg gcggccgggc gccccctccc tccccacgag
                                                                      4200
 geggeccaga caggeegget acgeegeeg egege
                                                                      4235
```

```
<210> 5030
<211> 4226
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(2513)
<223> similar to gi3882233 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5030
gccataacgg agacctatac ttctccaacg tgatgctgca ggacatgcag accgactaca
                                                                       60
gttgtaacgc ccgcttccac ttcacccaca ccatccagca gaagaaccct ttcaccctca
                                                                      120
aggteeteae caccegagga gttgeagaaa gaacaccaag etteatgtat eeccagggea
                                                                      180
ccgcgagcag ccagatggtg cttcgtggca tggacctcct gctggaatgc atcgcctccg
                                                                      240
                                                                      300
gggtcccaac accagacate gcatggtaca agaaaggtgg ggacctccca tetgataagg
ccaagtttga gaactttaat aaggccctgc gtatcacaaa tgtctctgag gaagactccg
                                                                      360
gggagtattt ctgcctggcc tccaacaaga tgggcagcat ccggcacacg atctcggtga
                                                                      420
gagtaaaggc tgctccctac tggctggacg aacccaagaa ccttattctg gctcctggcg
                                                                      480
aggatgggag actggtgtgt cgagccaatg gaaaccccaa acccactgtc cagtggatgg
                                                                      540
tgaatgggga acctttgcaa teggeaceae etaacecaaa eegtgaggtg geeggagaea
                                                                      600
ccatcatett cegggacace cagateagea geagggetgt gtaceagtge aacaceteea
                                                                      660
acgageatgg ctacctgctg gecaacgeet ttgtcagtgt getggatgtg cegeetegga
                                                                      720
tgctgtcgcc ccggaaccag ctcattcgag tgattcttta caaccggacg cggctggact
                                                                      780
gccctttctt tgggtctccc atccccacac tgcgatggtt taagaatggg caaggaagca
                                                                      840
acctggatgg tggcaactac catgtttatg agaacggcag tctggaaatt aagatgatcc
                                                                      900
gcaaagagga ccagggcatc tacacctgtg tcgccaccaa catcctgggc aaagctgaaa
                                                                      960
accaagteeg cetggaggte aaagaeeeea eeaggateta eeggatgeee gaggaeeagg
                                                                     1020
tggccagaag gggcaccacg gtgcagctgg agtgtcgggt gaagcacgac ccctccctga
                                                                     1080
aactcaccgt ctcctggctg aaggatgacg agccgctcta tattggaaac aggatgaaga
                                                                     1140
aggaagacga tttcgtgacc atctttgggg tggcagagcg ggaccagggc agttacacgt
                                                                     1200
gtgtcgccag caccgageta gaccaagacc tggccaaggc ctacctcacc gtgctaggac
                                                                     1260
ggccagaccg gccccgggac ctggagctga ccgacctggc cgagaggagc gtgcggctga
                                                                     1320
cctggatccc cggggatgct aacaacagcc ccatcacaga ctacgtcgtc cagtttgaag
                                                                     1380
aagaccagtt ccaacctggg gtctggcatg accattccaa gtaccccggc agcgttaact
                                                                     1440
cagccgtcct ccggctgtcc ccgtatgtca actaccagtt ccgtgtcatt gccatcaacg
                                                                     1500
aggttgggag cagccaccc agcctcccat ccgagcgcta ccgaaccagt ggagcacccc
                                                                     1560
ccgagtccaa tcctggtgac gtgaagggag aggggaccag aaagaacaac atggagatca
                                                                     1620
egtggaegee catgaatgee aceteggeet ttggeeceaa cetgegetae attgteaagt
                                                                     1680
ggaggcggag agagactcga gaggcctgga acaacgtcac agtgtggggc tctcgctacg
                                                                     1740
tggtggggca gaccccagtc tacgtgccct atgagatccg agtccaggct gaaaatgact
                                                                     1800.
tegggaaggg ceetgageea gagteegtea teggttacte eggagaagat tateeeaggg
                                                                     1860
ctgcgcccac tgaagttaaa gtccgagtca tgaacagcac agccatcagc cttcagtgga
                                                                     1920
accgcgteta etecgacacg gtecagggee ageteagaga gtaccgagee tactactgga
                                                                     1980
gggagagcag cttgctgaag aacctgtggg tgtctcagaa gagaçagcaa gccagcttcc
                                                                     2040
ctggtgaccg cctccgtggc gtggtgtccc gcctcttccc ctacagtaac tacaagctgg
                                                                     2100
agatggttgt ggtcaatggg agaggtgatg ggcctcgcag tgagaccaag gagttcacca
                                                                     2160
ecceggaagg agtacceagt geceetagge gttteegagt eeggeageee aacetggaga
                                                                     2220
```

```
caatcaacct ggaatgggat catcctgagc atccaaatgg gatcatgatt ggatacactc
                                                                     2280
                                                                     2340
tcaaatatgt ggcctttaac gggaccaaag taggaaagca gatagtggaa aacttctctc
ccaatcagac caagttcacg gtgcaaagaa cggaccccgt gtcacgctac cgctttaccc
                                                                     2400
teagegeeag gaegeaggtg ggetetgggg aageegteae agaggagtea eeageaceee
                                                                     2460
cgaatgaagg taggtgcatg gcagcagccc ctggggtaaa aggtcccagc taattccgag
                                                                     2520
gcctagagaa acactgagat ctgtagctgg ctgcctggga tggagaggaa atgagacttg
                                                                     2580
caagteetea ageeetegga aggtgagaac ceatettatg tgtgagaggt aggtgetgge
                                                                     2640
attgtatctg gagetcaget eteettggae eactgtggte acacetgggt ecceaettge
                                                                     2700
cctgacttgc tcagtcactt gacatctatc atctttcctt cttgtagagg aataaggaag
                                                                     2760
agagcatgag ttgagaaatg agagaaatca taatgaactc caaagaacag tgagtgttca
                                                                     2820
cctcttgagg gaggcaggaa tatgattgtg agtgctccca tgagggctct ggggacaacc
                                                                     2880
ttetttette gaaggeacat gggtteaagg aggtagggga aacegteagg atgacgetgt
                                                                     2940
tactggcatc atgagtagag cagagaatgt ggtccttcct tgcagcctga attggatgcg
                                                                     3000
ttgtcaggct gcagagagga ggaggagtta ggaaacagcc atttgccaag ccagcttcac
                                                                     3060
aaagagcaaa tgagttcatc acctgggtcc aggcgtcatc tggcagcatt tcagccccac
                                                                     3120
cagagetgea cetgeetgag gaeteeacta gagggggete caggeteace egeacaegea
                                                                     3180
ctggcatcag gggaatgtgc agtctgggac ctctcgagga ggcaaggctg caaaagcctc
                                                                     3240
aatactggca caccetetgg gaaaggetgg ggaccecegt gtgtetecag agatacaatg
                                                                     3300
gtotattoaa cagocattto ttgagtacco acaatgtgag gtgccagaca ctgccacaca
                                                                     3360
caagggatat acaaaggtaa caagaagctc acaccatcta gagggggagt catctataag
                                                                     3420
aatatctaat tgcatgtcta aatgaggggg cgcagtggct gggcagagaa ggggattcag
                                                                     3480
tettcacggg aagactecag agaagaggtg atgtgagtgg geactetgga agetgacaag
                                                                     3540
teategtgte tggtgettte cacagaaggg teaggteeeg tggeetggee caggeecaga
                                                                     3600
eggggtette tgaataceae eectaceege attecaggag ageateagtg etgeettete
                                                                     3660
tgggggetace aggecegetg egteaceceg ggateceagg eagetteaca agetgeceae
                                                                     3720
atcettecce ageceaceae tetagecagt agaccagege tgaggeagga gaagagggge
                                                                     3780
caggcagaag cagagaaagg ctgacagccc gctctgcatc cctctctggt ctcagaaacc
                                                                     3840
aggagtgagt cacacaacca getetecete etgetgtget ettetgeaet eteceaagee
                                                                     3900
ectgggcact egggaagttt attagggcag ggggacttag gttagtgget gatgtgtgte
                                                                     3960
tgtcaccaaa ggccaggcca ggccaggcca tgatgcactt tcttgattac tcaattctgc
                                                                     4020
aaatagatag ataaagagag ccccttcttc cctccctatg tgcaccccaa tacagaacat
                                                                     4080
cagataacaa agccctattg tccagcccca gtaaccacca cagagaatgt tctgcagccc
                                                                     4140
caggggacaa aaggacaaat agaggctttt ttcttaactt agggctttgc agaaaattca
                                                                     4200
agaatttcac ttagggctct cagtcc
                                                                     4226
```

```
<210> 5031
<211> 1208
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1210) ... (557)
<223> similar to gi4850326 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5031
atctacacct ccccaagac atcagggaca aagtggggtg gagtgagatg gggaaggaga 60
agaaggtata gaagactcca agggtcttct ttaaaggtac cctggtactc agttaacaat 120
tcctcccagg cagctagctc ctgtgagtgc caaagacaat ggaaaagagg aagggggggg 180
```

```
cggagggagg gagggagaag gaggggctgg gaaggcattc aagcagctgc agtttccgga
                                                                      240
tatgtgtcca catctgtgtt ctgtcttctg aaaaagaaaa atttcccccc aaaccacacc
                                                                      300
ctgcccctgc attgtctgtt tgacacaaag tttcaggacc ctgaaaaaaa gccccaaagt
                                                                      360
gcttcttcat catcttgggg aatacagggt acgtggtggt ggtctctgta ttttccgaag
                                                                      420
ctgggggtag ggagtgggca gactagcaag gtcagcctca ggaggctaaa acctctgacc
                                                                      480
ttgctgcagt cttcttagat gtcagaagag aaccaggttt ccaggcagag cactggggct
                                                                      540
tegacacaaa etgteagaaa ggettgtegg geetgetggt ettggeatee eegetggetg
                                                                      600
etttgcagat gacgetgtte gtgtgettge ageggeaace agggeggege agaeggtegt
                                                                      660
agccacgctg ggccagcttc acgcagccgg tggcaggcag gtagcagagc aggcagggca
                                                                      720
gcaccacgga gagagcaccc atgaaggacc agcgggcgca gcagttggag cgggagcagg
                                                                      780
agcaggggtg gtcagcgcag gagccctcat cgtcctcatt cgtgcagtgg tagaagatgc
                                                                      840
ectgeaceaa acacatgeae gigeeatagt tgaceagagt etgggetgag cacaggeaet
                                                                      900
cctggttgca gacccagcag gaaggcaacg tccgggggga tgcacactcc ttgcatttac
                                                                      960
actteccaea ggeetegeae ageaagaagt gettgteeag etegggtggg acegeeggge
                                                                     1020
cettgaggte cageggetgg cagtggacca cettgggetg gatgegeaca gecettggtg
                                                                     1080
aggcctggtc agccacgggt ggtggtgcca tgtggtctaa gagccgttgg tcagaggatg
                                                                     1140
tgctgctgct gctgctcaca gagctggggc gcccgctgaa ggagatccaa tggtgggtga
                                                                     1200
catcctgg
                                                                     1208
```

```
<210> 5032
<211> 1959
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1916)...(1208)
<223> similar to gi3413920 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5032
ccttgagact cgacatccag agttttttgt ggcctagtga tgtaggcact cttctgccac
                                                                       60
acaaccaatg gtgattactg aaattccaaa ctcctgaaaa gagctatcgg cccagtggtt
                                                                      120
tettttagaa ggeegtttgt gtggeaceaa aaageaattg etteeteeat teetactace
                                                                      180
tggaaacaca aacttttaaa ttcatgccag ttcaattgga acagtagcaa atttcatgaa
                                                                      240
gcagctaaaa agaagagcaa cagctggtac atcaggcatt aataatataa caaaggaaga
                                                                      300
aaaaagagaa atttttcatt agtacttttt gatgtcaatt tattatttat ccctttqcca
                                                                      360
gtattcaaac agacaggcag tcataaaaca ttaaaaaaga tcctttaaaa cggtcaggca
                                                                      420
tetgttttae eteagtteet ttttagaaae etggaaatea ggageeeegg ettttatget
                                                                      480
atagcaagtt tgacacttgc tgtatcaaaa atattgcttg aggatcacta cgtagaaaga
                                                                      540
gttttgttta aaattttatg aaaggctggt taggcaggca gacaatggtt tctaaggcaa
                                                                      600
gatccagtgt aaatcaggca atgtgctgtt teccaactgt ttgactcctc agttcatatt
                                                                      660
ctgaaaccgg ggggcgtttg acaaaaccca ctgtttcagt taattaggca tcctgtcaaa
                                                                      720
tctttccaat caaggactag gcatgctgca cctggtccta ggtttaaaaa acacattgtg
                                                                      780
gggggcaatt ctgatgtgac cctcaggggc ccgctggcca tgctcagaac tggcattcag
                                                                      840
cgtgcatgcc ataattacca tccacacaaa ataagtagac ctccttgtcc agcagctctg
                                                                      900
agagattetg cetaateeta atgacetgee acaceatttt aacttetttg ataaatgtet
                                                                      960
atccttgtga tttagacett teeteteetg taaagaaggt atctetteet gggacagaag
                                                                     1020
actcctcaga agtagaatca ctgtagaaat aaagcaaatg aaaaatggag aagcaaaaac
                                                                     1080
caaagtaaaa cagaagcctt aacagccctc tccccagcag gagcttgttg gaggaggtgt
                                                                     1140
```

```
gggtgctgag teeceeetee etagettgte ttgeeeteag tgetetgggt gettttgeet
                                                                    1200
ttccaggtac tgcccttggt gtagaggcca tggtccttga tgtacgtgat gacagcatcg
                                                                    1260
ggaatcaggt actttacget ctgcccttgg cccaaggete geetgatgta tgtggcactg
                                                                     1320
                                                                    1380
atctcattct gcacaggctc cttggccagg tgaatgttgt gctggtgcat ccgtaggatg
ggagattetg cgatgtaace ttttgggteg tgacetaete ggeecaegea caccaageea
                                                                     1440
aacttctcca ctatttcctg gatgtgcgca tccttccaga ggttgggggt ctggaaggtc
                                                                     1500
                                                                    1560
ttcaagacgt ctgccccaca gagaagcttc agctcaggca cagctgcagg ggtcgagaag
agtgeettge catggtetgg geettecate tggggtggag atetgageag tttgetgtga
                                                                     1620
tgatgcctca gcaccttcac tgtctccatc cactgtgcct gctcactctc ccaagggtcc
                                                                     1680
                                                                     1740
acceggatee agteggatgt etgeagggee ageegggeea tggeeacteg gtgatgagaa
getgegaggt etttetteee ataggtgteg ttgacaggag agatgatace etggatgace
                                                                     1800
tggtacattc ctgtttggtg taggtgatct ctggccacct caaacatgcg caggtgcatg
                                                                    1860
ttggtgatgg ggttaaagga gccacaggcc aggagcacca caggtattcg gctcttcatc
                                                                    1920
ttgtcaggca catccacacc tgttgcagtg caagtgcaa
                                                                     1959
```

```
<210> 5033
<211> 498
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(143)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5033
ttttttttt ttagtagaga tggggttttg ccatgttggc cagggtggtc tcacactcat
                                                                       60
aggeteaagt aatetgeeeg eeteageete caaaagtget gggattacag gegtgageea
                                                                      120
ctgtgcccgg cctgacttca aatcctgtgt tgaatagaag tagtgagagc gggcatcctt
                                                                      180
ctcttgttcc tgatcttgga ggcaaagatt tcagtctttc atctaaaatg actgaaagac
                                                                      240
tttcagccat gggccttgca tgactggcct ttattttgtt gcagtatatt ccttctcttc
                                                                      300
ctggtttgtg gagtgtttta ccaggaaagg gtgttcaggc tgggcacagt ggctcaaqtc
                                                                      360
acacaaaagt gtcaagtcag ccctgcccaa gggccccagt gcccatcttc ctgctgaggg
                                                                      420
gctgggcctc accttggctg gctgggcccc tcccacctgg atccctgcag accccaccgc
                                                                      480
actcagcctc acacgaaa
                                                                      498
```

```
<210> 5034
<211> 1349
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1351)...(332)
<223> similar to gi687827 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5034
ggcagtctgc tgacccttgg aagatgaagg agaaatggga gaaggcagag gggtcaggtg
                                                                       60
ggggctgcca gaggaagcgg ccctgagctg ctggttccca gtccctccct cataagcaaa
                                                                      120
gctgaggccc tcaggttacc acgggacact gttaagttta ttctagggtg agtgggtgcc
                                                                      180
caaggggggc agtgagtatg gecgaggtca cetggtggca gggtgetcag ggatggecae
                                                                      240
aggttetata gggccetgca gggcetgagt etetagteag ttgggatget teacettetg
                                                                      300
ccccacccca agggggttgg ggcagtcatg gatgtagtag ttttcgtaat tcgcagggat
                                                                      360
cagtgatggg cactgagcag gcttgattct cacacacata tgcagtggcc tggtcttcca
                                                                      420
                                                                      480
accytcygay gytactcayy aaagycayct gycygyacay gaayctcyay gygtccccat
cagccagaat cagcaccttg ttaggaatgt agacagagtg gacgcactgc accagggcct
                                                                      540
tggtgtcctt ggcctgacgg tctccacaga tcacgatctg cttgagggtc tgctgctggg
                                                                      600
ctgagagggc gcggaccatc tcgggcaacg ccaccgggac acgacgcatg cgctcggaaa
                                                                      660
aggeggteaa taggeaeaca caettgteea teeagteett gtggeeegtg aageeatgea
                                                                      720
geeggageag gttgtggget gaeaeggaat tggegetggg etetgeteea teetggtegt
                                                                      780
cetteagacg caggggcagg ccagececca geteageete aetgeagaag tageegeeae
                                                                      840
cctgggagtc ccaaaagagc ctgtcctgtg tgtcctgcag ccgcagagcc cactcgagcc
                                                                      900
acgcactete etgigaggee teatacaggt ecagcaggee ecgcaccacg aaggegtagt
                                                                      960
cctccaggaa gccccagcag ggtgggttgc tgtgctccac agtcccccca gggccggtgt
                                                                     1020
agcaggteeg cateaggegg ceaetggeea cateaaacat gtgeegette aggaaettgg
                                                                     1080
caccattggt ggcatagttg atcageetgt ettggeecag gacageecca gteacageat
                                                                     1140
agcetgacae cateaageea ttecaggeag ceageatett getgtecagg tgeggettgg
                                                                     1200
geegatgett eegggeetgg aagagettet eeageeetga attgageaag gteegeaegg
                                                                     1260
cctccacatc caagccaaag cgggcagcag tcagctccag cgagtaccgg acggtcagca
                                                                     1320
cattetggcc etgcagetec ceettgggg
                                                                     1349
```

```
<210> 5035
<211> 1911
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1912)
<223> similar to gi3882283 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5035
gagccatcca teggggagtt taatgagcag gttetgegae tgatgcacag cettggaata
                                                                       60
gatcagcaga aaaccattga gtctttgcag aacaagagct ataaccactt tgctgccatt
                                                                      120
tatttettgt tggtggageg cetgaaatea categgagea gttteecagt ggageagaga
                                                                      180
ettgatggcc gccagcgtcg gcctagcacc attgctgagc aaacagttgc caaggcacag
                                                                      240
actgtggggc teceagtgae catgeattea eegaacatga ggetgetgeg atetgeeete
                                                                      300
etececcagg catecaacgt ggaggeettt teatttecag catetggetg teaggeggaa
                                                                      360
gctgcattca tggaagaaga gtgtgtggac actccaaagg tcaatggctg tctgcttgac
                                                                      420
cctgtgcctc ctgtcctggt gcggaaggga tgccagtcac tgcccagcaa catgatggag
                                                                      480
```

```
540
acctccattg acgaagggct ggagacagaa ggagaggccg aggaagaccc cgctcatgcc
                                                                      600
tttgaggeat ttcagtccac acgcagcggg cagagacggc acactctgtc agaagtgacc
aatcaactgg tcgtgatgcc tggggcaggg aaaattttct ccatgaatga cagccctcc
                                                                      660
                                                                      720
cttgacagtg tggactctga gtatgatatg gggtctgttc agagggacct gaactttctg
gaagacaacc cttcccttaa ggacatcatg ttagccaatc agccttcacc ccgcatgaca
                                                                      780
tetecettea taageetgag acetaceaae eeageeatge aggetetgag eteceagaaa
                                                                      840
cgagaggtcc acaacaggtc tccagtgagc ttcagagagg gccgcagagc atcagatacc
                                                                      900
teceteacee agggaattgt ageatttaga caacatette agaatetgge tagaaceaaa
                                                                      960
ggaattctag agttgaacaa agtgcagttg ttgtatgaac aaataggacc ggaggcagac
                                                                     1020
                                                                     1080
cetaacetgg egeeggegge tecteagete caggacettg etageagetg ceeteaggaa
gaagtttete ageageagga aagegtetee actetecetg ceagegtgea tececagetg
                                                                     1140
tececaegge agageetgga gacceagtae etgeageaea gacteeagaa geceageett
                                                                     1200
etgtcaaagg cecagaacac etgtcagett tättgcaaag aaccacegeg gageettgag
                                                                     1260
cagcagetge aggaacatag getecageag aagegaetet ttetteagaa geagteteaa
                                                                     1320
ctgcaggcct attttaatca gatgcagata gcagagagct cctacccaca gccaagtcag
                                                                     1380
cagetgeece tteecegeca ggagaeteca eegeettete ageaggeece acegtteage
                                                                     1440
ctgacccage ccctgagece cgtcctggag ccttcctccg agcagatgca atacagecet
                                                                     1500
ttecteagee agtaceaaga gatgeagett eageceetge cetecaette eggteeeegg
                                                                     1560
getgetecte etetgeceae geagetadag cagcageage egecacegee accaececet
                                                                     1620
ccaccaccac gacagecagg agetgeecca geceettae agtteteeta teagaettgt
                                                                     1680 -
gagetgecaa gegetgette ecetgegeca gaetateeca etceetgtea gtateetgtg
                                                                     1740
gatggagece ageagagega cetaaegggg ceagaetgte eeagaageee aggaetgeaa
                                                                     1800
gaggeeeet ecagetaega eccaetagee etetetgage tacetggaet etttgattgt
                                                                     1860
gaaatgctag acgctgtgga tccacaacac aacgggtatg tcctggtgaa t
                                                                     1911
```

```
<210> 5036
<211> 1976
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (8)...(1108)

<223> similar to gi3560166 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5036
 tttcgtcaag agtggagatg acccaccggc catgagacag ggcagtgagc acacgtatga
                                                                        60
 gagetgtggt gaeggagtee cageeeegea gaaagtgett tteeeeaegg agegaetgte
                                                                       120
 tetgaggtgg gagegggtet teegegtggg egeaggaete cacaacettg geaacacetg
                                                                       180 ·
 ettteteaat gecaceatee agtgettgae etacacacea eetetageea actacetget
                                                                       240
 ctccaaggag catgetegea getgecaeea gggaagette tgeatgetgt gtgteatgea
                                                                       300
 gaaccacatt gtccaggcct tcgccaacag cggcaacgcc atcaagcccg tctccttcat
                                                                       360
 ecgagaeetg aaaaagateg eecgaeaett eegetttggg aaceaggagg aegegeatga
                                                                       420
gttcctgcgg tacatttttt ttgccatgca gaaagcctgc ctgaatggct gtgccgggtt
                                                                       480
ggatcgtcaa acgcaggcta ctaccttggt ccatcaaatt tttggagggt atctcagatc
                                                                       540
 acgegtgaag tgeteegtgt geaagagegt eteggaeaee taegaeeeet aettggaegt
                                                                       600
cgcgctggag atccggcaag ctgcgaatat tgtgcgtgct ctggaacttt ttgtgaaagc
                                                                       660
agatgteetg agtggagaga atgeetaeat gtgtgetaaa tgeaagaaga aggtteeage
                                                                       720
cagcaagege tteaceatee acagaacate caacgtetta accettteee teaagegett
                                                                       780
```

```
tgccaacttc agcggggga agatcaccaa ggatgtaggc tatccggaat tcctcaacat
                                                                      840
                                                                      900
acgtccgtat atgtcccaga ataatggtga tcctgtcatg tatggactct atgctgtcct
                                                                      960
ggtgcacteg ggctacaget gccatgccgg gcactattac tgctacgtga aggcaagcaa
tggacagtgg taccagatga atgattcctt ggtccattcc agcaacgtca aggtggttct
                                                                     1020
gaaccagcag gcctacgtgc tgttctatct gcgaattcca ggctctaaga aaagtcccga
                                                                     1080
                                                                     1140
gggcctcatc tecaggacag getectecte cettecegge egecegagtg tgattecaga
                                                                     1200
tcactccaag aagaacatcg gcaatgggat tatttcctcc ccactgactg gaaagcgaca
                                                                     1260.
agactctggg acgatgaaga agccgcacac cactgaagag attggtgtgc ccatatccag
                                                                     1320
gaatggctcc accetgggcc tgaagtccca gaacggctgc attcctccaa agctgccctc
                                                                     1380
ggggtcccct tcccccaaac tctcccagac acccacacac atgccaacca tcctagacga
                                                                     1440
ccctggaaag aaggtgaaga agccagctcc tccacagcac ttttccccca gaactgctca
                                                                     1500
ggggctgcct gggaccagca actcgaatag cagcagatct gggagccaaa ggcagggctc
etgggacage agggatgttg teetetetae eteacetaag eteetggeta cagecaetge
                                                                     1560
                                                                     1620
caacgggcat gggctgaagg ggaacgacga gagcgctggc ctcgacagga ggggctccag
                                                                     1680
cageticeage ceagageact eggeeageag egacteeace aaggeeeece agaceeecag
                                                                     1740
gagtggageg geceatetet gegattetea ggaaaegaae tgtteeaeeg etggeeaete
                                                                     1800
caaaacgccg ccaagtggag cagattctaa gacggtgaag ctgaagtccc ctgtcctgag
                                                                     1860
caacaccacc actgagectg caagcaccat gteteeteca ccagecaaaa aactggeeet
                                                                     1920
ttetgecaag aaggtgggtg tgtgggggte tegeegetge tgtgtateaa gagageteea
                                                                     1976
agagttgctt ggttgtggtt tgaagggagt gagaacattg teeggggget ttggeg
```

```
<210> 5037
<211> 418
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7)...(368)
<223> similar to gil469868 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5037
tatttcgtct ccctgcaggt ggaggtagaa tcgaggaaca gtccggagaa ggaggagcga 60
gtgcctgccg aggagatcac ctatgagaca ctgaagaaag ccattgtgga cagcgtagca 120
gtggaggagc aggagcgtga gcggcgggg caggtggtgg agaagttcca gaaggcaccc 180
ttcgaggaga ttgctgcaca ctgcggggcc cgggcatcgc tgctccagag caaactcaat 240
cagatctttg aaatcaccat ccggcccca ccaagcccat caggaaccat cactgcagcc 300
tacggtcagc cgcagaacca ctccatccc gtctacgaaa tgaagtttcc cgatctgtgt 360
gtatactgaa ttccaagagc ctgagctcct caaggagatg gggtctgagg aggggctc 418
```

```
<210> 5038
<211> 1240
<212> DNA
<213> Homo sapiens
```

```
<400> 5038
ttttttttgg ggaagaatgt gtcattttct gaatcccttc tccactgacc cactttccat
                                                                     60
ccctccacac aacttcagta ggttgatggc ttctactggt ccaggcccct tgaccccagc
                                                                    120
tagggcctca gggactttcg ggccttttcc aaaatttcct ccctgatctt ggggtagtcg
                                                                    180
gggtgctccc tgaggacatc gttgcagatt tcgatggcct ccacaaattt cttgtccttc
                                                                    240
aggtagttga aagcaagttt gaagccaatg gcagggttgg cgtgatgact gtacttccag
                                                                    300
                                                                    360
gccagtttgt agttggtgac tgcatccttg taggactgct ccttctccat gatgaagccc
atgtactcat aggeettgta geaggaettg ttgtattgea cacagegeeg cageagttet
                                                                    420
aaggegaggt egaacttget geeetggeag taaatgteag eeageaggag eeagetette
                                                                    480
tecaggiest cagesteact cageacecag ggggtetigg ccaggegett caacigcata
                                                                    540
600
acgetgteet teteageetg egetatetgg atgaagetge ceagegeage etecatgtta
                                                                    660
geetteteee tggtggeeag eeggeagagg eeetgeagea geegeagetg ggtetggetg
                                                                    720 -
gagtetgaat gtgggtaaaa etcaegeage agtttetegg eggtgeteae accetgetge
                                                                    780
tecaacteet tetteteeat gtagttgete teageteeet ggtteteaaa ageeteteeg
                                                                    840
cccacaacct cgttgtctgg attcagacag atctgcacca tgtggtagat ggcgctctgg
                                                                    900
ecceaagtge tgteettgeg tgeettgtte aggaacttta aggettegtt gggetgeeet
                                                                    960
atgtgccage agtagatace tetgcagtaa ttgaaccetg gttccaaagg cacceggeta
                                                                   1020
gacacettet tggccaatte aaagaaggea ggaatgtett caagttttee aettettett
                                                                   1080
agcagatcga ttaatttatg caataccaaa aaattgtcta aaataagaga cagaaatctc
                                                                   1140
caggctgaaa tgcccagtag ctgttatcag atgagggtgc tggggcctta ggagaagcca
                                                                   1200
agagatactg cccatctggg ctgagcaggg acattccaac
                                                                   1240
     <210> 5039
     <211> 1780
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (13)...(617)
     <223> similar to gi5824481 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 5039
cggtggaatt cgatggatgc ctgcaacagg tacagcaagc tgaattgctt agtggcgccc
                                                                     60
acactettee tggagtteea tggeteecag caggeactgg aggageaget geagegeaca
                                                                    120
gaggagatag tecageagaa eggageetet gaetteteet gggeeaagga ggeegaggag
                                                                    180
cgcagccggc tttggacagc acggcacaat gcctggtacg cagccctggc cacgcggcca
                                                                    240
ggctgcaagg gctactccac ggatgtgtgt gtgcccatct cccggctgcc ggagatcgtg
                                                                    300
```

<223> similar to gil213541 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

<220>

<221> misc_feature
<222> (1108)...(126)

360

gtgcagacca aggaggatct gaatgcctca ggactcacag gaagcattgt cgggcatgtg

```
ggtgacggca acttccactg catcctgctg gtcaaccctg atgacgccga ggaactgggc
                                                                      420
agggtcaagg cttttgcaga acagctgggc aggcgggcac tggctctcca cggaacgtgc
                                                                      480
acgggggagc atggcatcgg aatgggcaag cggcagctgc tgcaggagga ggtgggcgcc
                                                                      540
gtgggcgtgg agaccatgcg gcagctcaag gccgtgctag acccccaagg cctcatgaat
                                                                      600
ccaggcaaag tgctgtgaag ggggtctgag cacttagccc acaagttccc tgactacgga
                                                                      660
gccggttctg gaacttttct tcatgccacg gcccctgcaa ggaaatagat gctgaggcag
                                                                      720
tetteetgee agegageeca etgtatetgg geecaaggee agagggeeca gagagaagee
                                                                      780
tgagcaccgt gttacctccc tggccctctg gctggccccc aggagccttt ggttcaagta
                                                                      840
aacgacccca gggtggttcc ccagcaaagc tgcttcctct ctgctcctac gcatcctgtc
                                                                      900
ctggcgggaa gagagcgtct gggtccattc aagactctga tgacacccct ccccgaggcc
                                                                      960
teccaetgee ggggteecag gaccetteee cetteacetg gtgacaggaa caeteettte
                                                                     1020
ctggtatgga acgtgagete ccgtgacatg atgataggte tteteettgg ggeeteecee
                                                                     1080
aataaatctg taataaacct gaaacccacc tacagctacc tggaagtcag caggcagcac
                                                                     1140
ttecteceet ecceetecag ggtetetgte etttggteag tgacecettt gttttgggge
                                                                     1200
tgtcctctga cttcttatag cctggggagg aggttggtgc tcagggttcg gaaaggaacc
                                                                     1260
caggicectg teccagetae teegeeteag agetgaggae etgeceaegg cacatgicae
                                                                     1320
traggatggg rtroccaart gggretgaar egggretetg aaracactga atgtgtteet
                                                                     1380
cagcagetge caegteteta gaaacagaga tgagactatt tttgcaccca cetetteatg
                                                                     1440
gggtgatgta tcgtaccacc agctgttttg ccctcaaggt ctgtccaccc gagggcctgc
                                                                     1500
ccctgtcttg ggccggagcc cgtcttgaga ccttggcagt tgttcccccc taagcccaca
                                                                     1560
ggagggcgcc cgaaatcatg aagctcagat accacgcggc atctgcagct cacgactcct
                                                                     1620
etgeccaggg cetgeggeac teagecetgg geaaacetee teetatggte aggtaagtee
                                                                     1680
tggcagcetg gaagccaage tagteeteca teccetgeag gteccaggaa cetgcagtge
                                                                     1740
tgtctcatct tecttgcccc tctagecttc ggtccctttg
                                                                     1780
```

```
<210> 5040
<211> 421
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (16) ... (170)
<223> similar to gi3341906 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5040
ctcgcaggcc gcaaggtgct gctcttcgtc tcaggctacg tcgtgggctg gggtcccatc
                                                              60
120
tgcgtgctgg ccagctggct caccgccttc gtcctcacca agtccttcct gccaggggg
                                                             180
gtgagtgttc agcccaggc cccaggcccc taggccctct ctgactggcc aggacccttc
                                                             240
tcagtgccag gggctgtgcc aaggcctgct gtcaggaccc taactctcag tgaccctagg
                                                             300
agatgagcac acaccccctg aactcagaga ccccagagtg gtcacgtgat agcctagcaa
                                                             360
acgctcttca ttataagaaa caggaacggg cgtatgcaac tgctctggta agtcaggtta
                                                             420
                                                             421
```

```
<210> 5041
<211> 628
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(549)
<223> similar to gi2289244 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5041 cagtatattc ggtgctcttc gaactggtgc ttatatggtg tacattttga tgaccaaagg 60 cctgaagcag tcagtttgtg accagggttt ttacaatgga cctgtcagca aattctgggc 120 ' ttatgcattt gtgctaagca aagcacccga actaggagat acaatattca ttattctgag 180 gaageagaag etgatettee tgeactggta teaceacate actgtgetee tgtactettg 240 gtactcctac aaagacatgg ttgccggggg aggttggttc atgactatga actatggcgt 300 geaegeegtg atgtactett actatgeett gegggeggea ggttteegag teteeeggaa 360 gtttgccatg ttcatcacct tgtcccagat cactcagatg ctgatgggct gtgtggttaa 420 ctacctggtc ttctgctgga tgcagcatga ccagtgtcac tctcactttc agaacatctt 480 ctggtcctca ctcatgtacc tcagctacct tgtgctcttc tgccatttct tctttgaggc 540 600 ctacatcggc aaaatgagga aaacaacgaa agctgaatag tgttggaact gaggaggaag ccatagctca gggtcatcaa aaaaaaaa 628

```
<210> 5042
<211> 850
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (851)...(538)
<223> similar to gi5902966 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5042 cagtactcca atcaacattt atgtgcagga tcatcaacag acagaccatt ttacagtttt 60 cagaattaaa gtcttctagt tgcagtgaag tcttgaatct ggatcacctg gattcatgca 120 agatggcaca gggtgcttgt catcatctac atatagagtt agcttttttt gcccatgcac 180 aatgtttctt tatcaataat gaagctggat gataccaaat agattctatt gctttattga 240 ttattacttt cattaaacaa tgttagccat ataggatgat taaaaaaaca actaatatcc 300 ttggaatatg aacateetat taactgatac aaactgaete caeetttett atageagtga 360 attttcaggt cacatacaat cagtaattta tactccaaat acaacaatca cgtttgtatt 420 aatcatccag tacaattcac aggttcctat tacacaggtg gatgtactta gagagtttta 480 gcacaaaagc tgatacaaat atgaaagtgt gctcagtcga atggttagtg aggtgctaca 540 ggtgagtgtc ggcgatgggt atcctcctga gctccacgat ctgggagtca gtcaaggtgc 600 eccetectg getgeettga ccagatteat tateactgae actgagaeca geaccagttt 660

```
ttaatgcaaa tattaaatca tcaaactcct gggactcctc atcggctatc agtgacccct 720 ggccatatcc tccagaggac gggaacgtgg ctccattttg tggacttggc tttaaatcag 780 ggctggcctg actgcctgt tggaaggatg ctctctccca gtcaggtggc acctcctcca 840 tagcaccgat
```

```
<210> 5043
<211> 820
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (14)...(522)
<223> similar to gi297402 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5043
cttgacatgg ccccagctct teetggagae eetgeeggag eteetgeaca tgteeegeee
agcagaggat ggacccagcc ctggggccct ggtgcggagg agcagctccc tgggatacat
                                                                      120
etccaaggee gaggagtaet teetgeteaa gteeegeagt gaeeteatgt tegagaagea
                                                                      180
gtcagagcgg catgggctgg ccaggcgcct caccactgca cgccggcccc cagcaagctc
                                                                      240.
tgagcaggcc cagcaggaac tettcaatga getgaageca getgtggatg gggcaaactt
                                                                      300
cattgttaac cacatgaggg accagaacaa ttacaatgag gagaaagaca gctggaaccg
                                                                      360
agtggcccgc acagtggacc gcctctgcct gtttgtggtg acgcctgtca tggtggtggg
                                                                      420
cacagootgg atottootgc agggogttta caaccagoca ccaccccago ottttootgg
                                                                      480
ggaccectae tectacaacg tgcaggacaa gegetteate tagggtggge etgttgggga
                                                                      540
gccaggagac agcagggtct gagagaggag ccacagtccc taatgacacc cactcctagc
                                                                      600
cctgaggctc gtgcccctca gactggggaa gagtccaagg aagggaggga gcagccactc
                                                                      660
etcaatgete aatggeteee etgaaateaa gacaggggee accegagatg gtetgagggt
                                                                      720
ggacatcggc tacagtgggt gggcaggacg atttgggggg aggcccgagg ctggctcagg
                                                                      780
ggccagggag gagaacactc agggtggcct cagggggaga
                                                                      820
```

```
<210> 5044
<211> 841
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(842)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (812)...(319)
<223> similar to gi297437 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5044
tttttttttt ttcaccattg aagaacctgc attatcgttt attgtgatcc taattcggtc
                                                                       60
cacagtaaca attgaaactg cctcgactaa attttaagtt tctggggcag caccaccatg
                                                                      120
aaggcagega etgeettttt aaaagacagg gttetgacat teagagattt etgtttetet
                                                                      180
atccatcatt tttgggcatc ttgaatcacc tgatttagag tcagtgacat cctgactgga
                                                                      240
ttggttctgc tctcgctggg cgggtgagac ccccagaccc acgtccacag tgcacctgat
                                                                      300
gttctcccag cggtcgtcac ttccccaagg aggccaggta ggcataccag aacagagetg
                                                                      360
ccaggttggc gaagagcacc cggaacttca gagggacgta gttgatgttg atgaactgta
                                                                      420
gtggcgtcca caccegccag ttcatcctca gcgccggcca gaagcccccc ctcatcttgg
                                                                      480
eggegaagge tgaggegtet tteeeeteea gaaagtteat gatgaggaag aacaacatga
                                                                      540
                                                                      600
ggaaggccgg tgcaaagacg aggcggtcca ggagaagcct cctgagccct gccaggggga
cctcaggagg gatccaatgt tccatgaaga agtagaagaa gtgactcagc ggccctgtga
                                                                      660
agaagaaccc gtaaacggca tatctcagag gcccaccgac atccagactt ctagagtttt
                                                                      720
cttttttccg cttcttctca atcatctggg ccaggaagtt cccaagtgct gacaaaatgc
                                                                      780
cactggtggc cgccttggtg agcaccggga attccaccac ncggactaag gtcctcaagg
                                                                      840
                                                                      841
```

```
<210> 5045
<211> 1988
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (34)...(759)
```

<223> similar to gi200785 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5045
agetgeacea etagaaagat ggeggageaa gageaaagaa aaateeettt ggtteeagaa
                                                                   60
aatotootga aaaagaggaa ggottatoaa goootcaaag coaccoaggo aaagcaggoa
                                                                  120
cttttggcaa agaaggagca gaagaaagga aaagggctca ggtttaagcg actggaatca
                                                                  180
ttectacatg attectggeg geagaaaegt gacaaggtge gteteagaeg actagaagtg
                                                                  240
aaacctcatg cottggaatt godagataaa cattcottgg cotttgttgt acgcatcgaa
                                                                  300
aggattgacg gcgtgagttt actggtgcag agaaccattg caagacttcg cctaaagaaa
                                                                  360
attittagtg gtgtctttgt aaaagtcacc ccccagaatc taaaaatgct gcgtatagtg
                                                                  420
gaaccttatg tgacctgggg atttccaaat ctgaagtctg tccgagaact cattttgaaa
                                                                  480
cgtggacaag ccaaggtcaa gaataagacc atccctctga cagacaatac agtgattgag
                                                                  540
gagcacctgg ggaagtttgg cgtcatttgc ttggaagacc tcattcatga aattgccttc
                                                                  600
ccagggaage atttccagga gatetcatgg ttettgtgcc etttccacet etcagtggcc
                                                                  660
cgtcatgcta ccaaaaatag agtgggcttc ctcaaggaga tgggcacacc tggctatcgg
                                                                  720
ggtgaacgca tcaatcagct catccgtcag ctgaactaga cccaggtgcc aaactgcggt
                                                                  780
840
ttcagagaag attatttcct gctttatctt cagaaactgg aaagggtcaa agaaaagaca
                                                                  900
gtagetggee ggtegtggtg geteatgeet gtaateecaa caettaggga ggetgaggtg
                                                                  960
```

```
ggcagatcac ctgaggttgg gagttcgaga ccagcctgac caacatggag aaatgccatc
                                                                     1020
tctactaaaa atacaaaaat tagccgggca tggtggcacg tgcctgtaat cccagctact
                                                                     1080
caggaggetg aggcaggaga atcgcttgaa cctgggaggt ggaagttgca gtgagctgag
                                                                     1140
                                                                     1200
atcacgccat tgcactccag cctgggcaac aagcgaaact ctgtctcaaa aaaaaagaaa
agacagtage atatgtteat gteaageace teteateaca gtegagttee aaggaaaaat
                                                                     1260
tecagegttt tetgeattgg gtgetgtgte atetgaaate ggeacattee atggaggaag
                                                                     1320
gagtcctgct ttgttgcatg tatcctaggg tttaatgttg gtaaatgagt cactctagca
                                                                     1380
tttgtagaag gctccctgag actcctgcag cagtcgacca agcccaagga cataattgaa
                                                                     1440
tetggagagt cetggggeet tgttttgaaa aagaettgaa atacacatag gaagaaagge
                                                                     1500
ataaaaataa atgttcactt gtctctgctg tgagtatgtg ttccaacttt tcagtgatgg
                                                                     1560
ctttgagaat teteaaactt gaetggetet aagtgtatet ggtggetttt gtategtaac
                                                                     1620
ctgaaactgg cttagtactt tttcctaaaa gctcaggatt tgagaatgag gaccccttcg
                                                                     1680
ccaggaaaac atgtatacac tcaaaatttt gcttgcagtt ctagggtgtt tagacccttc
                                                                     1740
teagatacet gtgeatetta tgggttttgt ttttetettt gagacagtet caccetgttg
                                                                     1800
eccaggetgg agegeagtgg egtgateteg geteattgea geeteeacet eetgggttea
                                                                     1860
agtgattetg ceteageece ttgateaget gggattgeat geatgtacea ceacacegg
                                                                     1920
ctaattettg tatttttagt agagatggag acagagttte accatgtagg teaggagtte
                                                                     1980
gagaccgg
                                                                     1988
```

```
<210> 5046
<211> 1346
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20)...(706)
<223> similar to gi2636482 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5046
ggtggtggaa ttcgcggatg tggagaagaa aggtgctggc aggacagagt tccgctaccc
                                                                       60
ttcctatgtg cagcacatca tgggggacat attctcccag ggatttgggc ctttccgctg
                                                                      120
ggtgtgcaca tcgggggacc cccaggacct ggcggtcaca gacgaactgg ccacatctgt
                                                                      180
gctggaggaa gccattgctg atggagtgaa ggtgtctgtg aagctgcagt acatggacaa
                                                                      240
cateegetgg ateegggagg cegecaggea eeggetggtg gtgggeteee aggeaaggat
                                                                      300
cctgtactca gaccagaagg gccgcgtggc catcgctgtg gccattaacc aggccatcgc
                                                                      360
ctgcaggagg atcaaggcgc cggtggtcct gagccgagat caccatgacg tgagcggcac
                                                                      420
cgacagecee tttagggaga cetecaacat ttaegaegge tetgeettet gtgeagaeat
                                                                      480
ggctgtgcag aacttcgtgg gagatgcctg tcgcggagcc acctgggtcg cccttcacaa
                                                                      540
cggaggggc gtgggctggg gtgaggtgat caacggggga ttcggcctcg tgctggacgg
                                                                      600
taccccggag gccgagggga gagccaggct gatgctcagc tgggatgtct ccaatggtgt
                                                                      660
ggcccggcgc tgctggtcag ggaaccagaa ggcctatgag atcatctgcc agaccatgca
                                                                      720
ggagaacagc accttggtgg tgacactgcc tcacaaggtg gaggacgagc gggtgctcca
                                                                      780
graggeretg cagetetgag ggageragga gtegeggere etgeeteret terteretgg
                                                                      840
cgatcctcac ctgcccagcc atggcacaca cccttcctgc acacccgcac tacctgcact
                                                                      900
totogoacat cotcaegtgg coettatggt geoetgtgca gggtgccacc acagcetcat
                                                                      960
tttacagaca gcccctgag gcccagagac atgcagctct ctgtccacaa ccatgccact
                                                                     1020
tgcatgggag ccctgaaggc tgtcaaagtc catttagggc caagtcccaa gcctgcccgg
                                                                     1080
gggccctgcg gtgaacactg gtcaagctct ctccggctgg gatgatcaca ccctctgctt
                                                                     1140
```

```
cctggccacc tgccagcctc catgcaactc tgtctgtctg ctgcccatct gctgtctgtg 1200 caagcaactt ctggaccctg gcaccctggg ctgctggcct ggaggagttc gggaaggagg 1260 atagaccagg aaataaaggg tcaacagagc tgtgtgctgc actgtgggct ggtgggacgg 1320 ggcaggccgg gtcttgccta aggata 1346
```

```
<210> 5047
<211> 672
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)...(656)
<223> similar to gi2781386 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5047
tectgtggtg gaattegagg eccaectggg tgacacettg atcateaagt gtgacaceaa
                                                                       60
gcagcaaggg atgaccaagg tgtgggtgac accaagtaat gaacgggtgc tagatgaggt
                                                                      120
gaccaatggc acagtgagtg tgtctaagga tggcagtctt cttttccagc aggtgcaggt
                                                                      180
cgaggacggt ggtgtgtata cctgctatgc catgggagag actttcaatg agacactgtc
                                                                      240
tgtggaattg aaagtgcaca atttcacctt gcacggacac catgacaccc tcaacacage
                                                                      300
ctataccacc ctagtggget gtatecttag tgtggteetg gteeteatat acctatacet
                                                                      360
caccccttgc cgctgctggt gccggggtgt agagaagcct tccagccatc aaggagacag
                                                                      420
ectcagetet tecatgetta gtaccaeace caaccatgat cetatggetg gtggggacaa
                                                                      480
agatgatggt tttgaccggc gggtggcttt cctggaacct gctggacctg ggcagggtca
                                                                      540
aaacggcaag ctcaagccag gcaacaccct gccagtgcct gaggccacag gcaagggcca
                                                                      600
acggaggatg teggatecag aateagteag eteggtette tetgatacge ceaattgtgt
                                                                      660
gtgagcagga tg
                                                                      672
```

```
<210> 5048
<211> 1732
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (320)...(525)
<223> similar to gi4235356 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5048
ttttttttt tttgcgaaag aacagaagag tataatgttc aacatgcagg gaaaaaaata

```
acaatacata tttcagaaat aggagcagct tcagtgcagg cagtatcatg gcagccactc
                                                                      120
cacgggagga acgggatect ctgccaacet tgtcagecae tecaactaag cagetgetge
                                                                      180
accaggtgtg ttgctgctgt ctttctaagg gttcaagaac atgggctctg gggtcatatg
                                                                      240
                                                                      300
gcctgcgttc acattccagc tccattcata gcctgcatga cctttagcac atgtcttggc
ttctctgcct caatttcccc atctcatgga cctgctggcc aaggacgacc agaatggcga
                                                                      360
ggcggaggcc ttcaaggcag agatcaagaa gaccgacgtg aaagaggaga agaggaagaa
                                                                      420
                                                                      480
ggagctgaac gaaatcttga aaagcacagt gagcagcaac gacaagaaaa ccaaaggccg
gacgggctgg ccgcagcacg tctgggccct ggagctcaag cagtgaggag gaggagaagg
                                                                      540
aggaggagga gagcgcgagt gagcaggggc caaggcgcca gatgcagacc caggactccg
                                                                      600
gaaaageegt eegegeteeg etetgaggae teettgeatt tggaateate eggtttattt
                                                                      660
atgtgcaatt teetteeeet etetttgaee eeetttgagg catetgetee eegteteeee
                                                                      720
ctccaaaaaa aaagtggata tttgaagaaa agcattccat attttaatac gaagaggaca
                                                                      780
ctcccgtgtg gtaagggatc ccgtcgtctc atagattctg tgtgcgtgaa tgttccctct
                                                                      840
tggctgtgta gacaccagcg ttgccccccg ccaacctact caaccccttc cagataaaga
                                                                      900
cagtgggcac tagtgcgttt gtgaagtgta tctttaatac ttggcctttg gatataaata
                                                                      960
ttcctgggta ttataaagtt ttatttcaaa gcagaaaaca gggccgctaa catttccgtt
                                                                     1020
ggggtcggta tctagtgcta tccattcatc tgtggtcgtt ccctctttga agatgtttcc
                                                                     1080
aacagccact tgttttgtgc acttccgtcc tctaaaacta aatggaattt aattaatatt
                                                                     1140
gaaggtgtaa acgttgtaag tattcaataa accactgtgt ttttttttt acaaaaacct
                                                                     1200
taatttttta atggctgata cctcaaaaga gttttgaaaa caaagctgtt atacttgttt
                                                                     126.0
togtaatatt taaaatatto agaagtaaac taaattatoa tgattgooto taactttatt
                                                                     1320
ttaaagactc agtgggttcc aaccagttca ccctgacctg cggcctacgc agaagggagg
                                                                     1380
gagggtgctc ttaaagagga aggtgtcctt gttacaaaat cctgcaaatg ggtctggggg
                                                                     1440
tttgtcgggt gtgggtgtct ccttcccctc ttccccccag ctgggggaac ggctggagta
                                                                     1500
ggtctctaga aggaagatct gggctggaga acccagtccg gcagttcgct cagaaggtgt
                                                                     1560
aaaggtgctc ttggctttcc tgaagtcaat cagaagccat ttcttgaggc cgtcagtttt
                                                                     1620
tgtttggaga gtgtttctgg tggaggagtt gtgaggagaa ccccggcatt attgctgcaa
                                                                     1680
cgggaactag tctggggtgt ttaattcaaa ctatggggct ttcatccaaa aa
                                                                     1732
```

```
<210> 5049
<211> 1223
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(365)
<223> similar to gi198609 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400>.5049
gcctcacagt acatcagcga actcacacag gggagaactc ctttgaatgt aataaatgtg
                                                                       60
ggaaaacatt ttactataaa tcaggcctca ctaaacatca gagaaaacac acaggggaga
                                                                      120
agccctatga atgcacagaa tgtggcaaat cttttgctgt gaattcagtc ctcagattac
                                                                      180
atcaaaggac tcacacagga gagaagccct atgcatgcaa ggaatgtggg aagtcctttt
                                                                      240
ctcagaagtc acattttatt atacatcaga gaaaacacac aggggagaag ccctatgagt
                                                                      300
gtcaggagtg tggggaaacc tttatccaga agtcacaact cactgcacat cagaagacac
                                                                      360
acacaaagaa gaggaatgct gagaagtaag atgagttggg aaattctctt gactgaatta
                                                                      420
atccttcaaa acaatcagat aattcacaca agaggtacac cttatgaatc gcatcaatag
                                                                      480
agggaaattt tcagctacaa tctttgctct ctctgtgtat cagcaaatac atagagagat
                                                                      540
```

```
tctqtacatt tatttgggag aaaattttat catattttag gcttttctaa atattagata
                                                                      600
atatagatgg cagaagtcat gcaaattgta aaacaggaag gaaacctttc agaagtcata
                                                                      660
cttttgtttt gcaacataga agtcacacag gagaaaaatc ctgtaagtaa aacgaatgtc
                                                                      720
                                                                      780
atgacatttt ctgtcagggc agccagctgt agacatccaa aagctcacaa atgagaagct
ccttgagtat ctagaaatct ctttacacaa ttggagctca tgtactagag aattcaaagg
                                                                      840
gataactgca aagacactgg tagatataga agcctttatt aagaattgat gtttcattca
                                                                      900
atttcagatc actggtactt ggatagatat tttaaatatt tggaaggtgt tcaataaaaa
                                                                      960
ttcaaataat ttgtactgag ggaaacagtt atactacaaa tcatgttgca gatctgatgc
                                                                     1020
cgagattgct ctattttaaa aggaaacctg caaatgtcta catatatgaa gcttttaaaa
                                                                     1080
agcacaagtt atcaggcaac atcattaaac atacattaaa tgtctgttag catataggat
                                                                     1140
tttgtgcgta tgtgagtgtg ctataacatg taacttgcgg atgttcagcg tgcatgtgga
                                                                     1200
atccatccat aatggtacat agc
                                                                     1223
```

```
<210> 5050
<211> 2763
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (22)...(1090)
<223> similar to gi5630077 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5050
ccatatccat gtggtggaat tcacacaatt ggtcagctgc ttccacagca gatgcaagca
                                                                       :60
ttccattctc ctaaagcact cttccctgtg ggctatgaag ccagccggct gtactggagc
                                                                      120
actegetatg ccaataggeg etgeegetae etgtgeteea ttgaggagaa ggatgggege
                                                                      180
ccagtgtttg tcatcaggat tgtggaacaa ggccatgaag acctggttct aagtgacatc
                                                                      240
tcacctaaag gtgtctggga taagattttg gagcctgtgg catgtgtgag aaaaaagtct
                                                                      300
gaaatgetee agetttteee agegtattta aaaggagagg atetgtttgg cetgacegte
                                                                      360
tetgeagtgg caegeatage ggaateactt cetggggttg aggeatgtga aaattatace
                                                                      420
ttccgatacg gccgaaatcc tctcatggaa cctcctcttg ccgttaaccc cacaggttgt
                                                                      480
gcccgttctg aacctaaaat gagtgcccat gtcaagaggt ttgtgttaag gcctcacacc
                                                                      540
ttaaacagca ccagcacctc aaagtcattt cagagcacag tcactggaga actgaacgca
                                                                      600
ccttatagta aacagtttgt tcactccaag tcatcgcagt accggaagat gaaaactgaa
                                                                      660
tggaaatcca atgtgtatct ggcacggtct cggattcagg ggctgggcct gtatgctgct
                                                                      720
cgagacattg agaaacacac catggtcatt gagtacatcg ggactatcat tcgaaacgaa
                                                                      780
gtagccaaca ggaaagagaa gctttatgag tctcagaacc gtggtgtgta catgttccgc
                                                                      840
atggataacg accatgtgat tgacgcgacg ctcacaggag ggcccgcaag gtatatcaac
                                                                      900
cattcgtgtg cacctaattg tgtggctgaa gtggtgactt ttgagagagg acacaaaatt
                                                                      960
atcatcaget ccagteggag aatecagaaa ggagaagage tetgetatga etataagttt
                                                                     1020
gactttgaag atgaccagca caagattccg tgtcactgtg gagctgtgaa ctgccggaag
                                                                     1080
tggatgaact gaaatgcatt ccttgctagc tcagcgggcg gcttgtccct aggaagaggc
                                                                     1140
gattcaacac accattggaa ttttgcagac agaaagagat ttttgttttc tgttttatga
                                                                     1200
ctttttgaaa aagettetgg gagttetgat tteeteagte etttaggtta aageagegee
                                                                     1260
aggaggaage tgacagaage agegtteetg aagtggeega ggttaaaegg aatcacagaa
                                                                     1320
tggtccagca cttttgcttt tttttctttt ccttttcttt ttttttggtt ggtttttggt
                                                                     1380
ttggtttttc ccttgggggg gggtttcatt gtttgggttt tctagtctca ctaaggaaaa
                                                                     1440
acttttactg gggcaaaaag ccgatggctg ccctgccccg ggcaggggcc ttcctatgaa
                                                                     1500
```

```
tgtaaaactg aaatccccac cgagggggac agaaagtgct gcccacggcc ttattaaaaa
                                                                     1560
ggggcaggcc ctctaacttc aaaatgtttt taaataaagt agacaccact gaacaaggaa
                                                                     1620
tgtactgaaa tgacttcctt agggatagag ctaagggata ataacttgca ctaaatacat
                                                                     1680
ttaaatactt gattccatga gtcagtttat tgtagttttt gatttctgta aaataagaga
                                                                     1740
aacttttgta tttattattg aataagtgaa tgaagctatt tttaaataaa gttagaagaa
                                                                     1800
agecaagetg etgetgttae etgeagaact aacaaaceet gttaetttgt acagatatgt
                                                                     1860
aaatattttg agaaaaaata cagtataaaa atagttattg accaaatgct accaggctct
                                                                     1920
gcagcagctc gggggcttat aaaatgttca tagggatgtt acaatataat tttgtgttat
                                                                     1980
                                                                     2040
aaaatatgcc attataatta tgtaataacc aaaatttcaa cctagagtgt tgggggtttt
ttggaaaccg cagtotatta gtactcaatg gttttataca cottacttot gacagagogg
                                                                     2100
ggcgtatgct acgactacaa cttttatagc tgttttggta atttaaacta attttttcat
                                                                     2160
attatattgt tgcatcccta cttcttcagt caggtttttt tgtgcttaca atttgtgata
                                                                     2220
actgtgaata actgcttaaa aatacaccca aatggaggct gaattttttc ttcagcaaaa
                                                                     2280
gtagttttga ttagaacttt gtttcagcca cagagaatca tgtaaacgta ataggatcat
                                                                     2340
                                                                     2400
gtagcagaaa cttaaatcta accctttagc cttctattta acacaaaaat ttgaaaaagt
taaaaaaaaa aaggagatgt gattatgctt acagctgcag gactctggca atagggtttt
                                                                     2460
tggaagatgt aattttaaaa tgtgtttgta tggaactgtt tgtttacatt tctttaataa
                                                                     2520
aaaaaacact gttttgtgtt tgcttgtagg aaacttaatc accattttga accaggttag
                                                                     2580
ctttttattt tggtacttaa aattetggta etgacaette acaggetaag tataaaatga
                                                                     2640
agttttgtgt gcacaattca agtggactgt aaactgttgg tatattcagt gatgcagttc
                                                                     2700
tgaacttgta tatggcatga tgtattttta tettacagaa taaatcaatt gtatataaaa
                                                                     2760
                                                                     2763
```

```
<210> 5051
<211> 1853
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1011)

<223> similar to gi5052516 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5051
eggeegegte gaeatgaget tgteegteag etggtagett teattegtaa aagagataaa
                                                                       60
agagtgcagg cgcatcgaaa acttgtggaa gaacagaatg cagagaaggc gaggaaagcc
                                                                      120.
gaagagatga ggcggcagca gaagctaaag caggccaaac tggtggagca gtacagagaa
                                                                      180
cagagetgga tgactatgge caatttggag aaagagetee aggagatgga ggeaeggtae
                                                                      240
gagaaggagt ttggagatgg atcggatgaa aatgaaatgg aagaacatga actcaaagat
                                                                      300
gaggaggatg gtaaagacag tgatgaggcc gaggacgctg agctctatga tgacctttac
                                                                      360
tgcccagcat gtgacaaatc gttcaagaca gaaaaggcca tgaagaatca cgagaagtca
                                                                      420
aagaagcatc gggaaatggt ggccttgcta aaacaacagc tggaggagga agaagaaaat
                                                                      480
ttttcaagac ctcaaattga tgaaaatcca ttagatgaca attctgagga agaaatggaa
                                                                      540
gatgcaccaa aacaaaagct ttctaaaaaaa cagaagaaaa agaaacagaa accagcacag
                                                                      600
aattatgatg acaatttcaa tgtaaatgga cctggagaag gagtaaaggt tgatccagaa
                                                                      660
gatactaact taaatcaaga cagtgccaaa gaattggaag atagtcccca ggaaaatgtc
                                                                      720
agtgtcacag agatcattaa accatgtgat gatccaaaaa gtgaagctaa aagtgttcct
                                                                      780
aaacccaaag gaaagaaaac caaagatatg aaaaaacctg tcagagtacc tgctgaacca
                                                                      840
caaacaatga gtgttcttat cagctgtaca acctgccata gtgaatttcc atctcggaat
                                                                      900
```

```
960
aaactttttg accatctaaa ggccacaggt Catgcaagag caccttcatc atcgtcttta
aacagcgcaa caagtagtca aagcaagaaa gagaaacgta aaaacagata gagattctgc
                                                                     1020
ctgtgctttt gtttgactgt ctctagattt tgaaaccaaa aaactgaact gaaatcatct
                                                                     1080
aaagagttaa aatttcagtg atctgcaatt aattacattg tggaagatta ttttttatct
                                                                     1140
tgtaaaaaca ctittttggt ttaatatata tttttaaaac atttcactag tgattgaatt
                                                                     1200
ctacttttgc catctgaatt gacttgaatg tettaaaaca ggtaaatact gtaaagtgtg
                                                                     1260
                                                                     1320
tattettgat gtttattgge teatgtggae agaaatgtae agggagaatt acattatttt
aacacacaga agtgcaactt totgotttat tttotgaatt toacattact titacttaat
                                                                     1380
gcttttgtgt tttgttaata cttcataata tgtgaaaaac tcggatcttt taaaaagcat
                                                                     1440
catagatcat ttttccatat gacactggtt ccgattttaa aaattatttt taaataaccg
                                                                     1500
attattgatt actgtatttt tittictcaag aacagtgata ggtagaaact aattgaacat
                                                                     1560
ttggtagtet tteaagaata gtgtetette aaggttttae ttgatttaat ttgatatttt
                                                                     1620
actggtttac cagtaaggtg tattgttcag ttttttgctc cgatttgaat tgtggaggtg
                                                                     1680
gaageaaatt agtttacatg gcatgtcctc cctaggcaca gtgacagctg taaagtatga
                                                                     1740
cggaacaagg tagcagatgg tacagaattt atactattta agaagagatg tggcgttctt
                                                                     1800
cattgagttt tittetteac tattiteaga agtittigtt ettititti teg
                                                                     1853
```

```
<210> 5052
<211> 2039
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (88)...(735)
<223> similar to gi5911875 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5052
atcogccaag cttggcacga ggcctcgtgc catggtctgg ctgcactcag tccctcaagc
                                                                       60
aagggeteca tggaggetgg ceettacetg ceeegageee tgeageagee tetggaacag
                                                                      120
etgacteggt atgggegget cetggaggag etcetgaggg aagetgggee tgageteagt
                                                                      180
tetgagtgee gggeeettgg ggetgetgta cagetgetee gggaacaaga ggeeegtgge
                                                                      240
agagacetge tggeegtgga ggeggtgegt ggetgtgaga tagatetgaa ggageaggga
                                                                      300
cagetettge ategagaeee etteaetgte atetgtggee gaaagaagtg cettegeeat
                                                                      360
gtetttetet tegageatet eeteetgtte ageaagetea agggeeetga aggggggtea
                                                                      420
gagatgtttg tttacaagca ggcctttaag actgctgata tggggctgac agaaaacatc
                                                                      480
ggggacagcg gactotgott tgagttgtgg tttcggcggc ggcgtgcacg agaggcatac
                                                                      540
actictgeagg caaceteace agagateaaa eteaagtgga caagttetat tgeecagetg
                                                                      600
ctgtggagac aggcagccca caacaaggag ctccgagtgc agcagatggt gtccatgggc
                                                                      660
attgggaata aaccetteet ggacateaaa geeettgggg ageggaeget gagtgeeetg
                                                                      720
ctcactggaa gaggtgaggg ccagggtgct ggggggtggc ccccaggagt gaagacettg
                                                                      780
acaatgagga tacaaagggg aggtatggtg gaaagtcagg aaaggcatct cgtccccaaa
                                                                      840
tcagtgggac tggctgggag, gccctctgtg agactgaggg tcattccagg gagccaagag
                                                                      900
ggettteeca caccageace ceacececa etececacte tetgeageeg ecegeaceeg
                                                                      960
ggcctccgtg gccgtgtcat cctttgagca tgccggcccc tcccttcccq qcctttcqcc
                                                                     1020
gggagcctgc tecetgeetg ecegegtega ggaggaggee tgggatetgg acgteaagea
                                                                     1080
aattteeetg getteeeett cageeeeaga aacaettgae tettetggag atgtgteeee
                                                                     1140
aggaccaaga aacagcccca gcctgcaacc cccccaccct gggagcagca ctcccaccct
                                                                     1200
ggccagtcga gggatcttag ggctatcccg acagagtcat gctcgagccc tgagtgaccc
                                                                     1260
```

```
caccacgoot otgtgacotg gagaagatoc agaacttgcg tgcagottot cototcagca
                                                                     1320
cactttgggc tgggatggca gtggggcata atggagccct gggcgatcgc tgaatttctt
                                                                     1380
                                                                     1440
ccctctgctt cctggacaca gaggaggtct aacgaccaga gtattgccct gccaccacta
                                                                     1500
tetetagtet ecetagettg gtgeettete etgeaggagt cagageagee acattgettg
                                                                     1560
cetteatace etggaggtgg ggaagttate cetetteegg tgettteeca teetgggeea
                                                                     1620
ctgtatccag gacatcactc ccatgccage cctccctggc agcccatgtt ctcctctttt
ctcacccct gactttccct gagaagaatc atctctgcca ggtcaactgg agtccctggt
                                                                     1680
gactccattc tgaggtgtca caagcaatga agctatgcaa acaataggag ggtgtgacag
                                                                     1740
                                                                     1800
gggaaccgta gactttatat atgtaattac tgttattata atactattgt tatattaaat
gtatttactc acactttgcc tctaaggagc tagagtagtc ctctggatta aggtgataaa
                                                                     1860
taacttgage acttteeete aaccageeet taactagaac acagaaaata aaaccaagae
                                                                     1920
tggaaggtcc cctctacccc tcccaggccc agagctagct gactgtgtat gagcctggga
                                                                     1980
gaatgtgtct cctccacagt ggctcccaga ggttccacac actctctgaa gctccttct
                                                                     2039
```

```
<210> 5053
<211> 3123
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) . . . (742)
<223> similar to gi5912134 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5053
gtcaggtcca tgagctgccc accgtcctgg ccttactgtg cccctgccc caccaacata
                                                                    60
ggtgaaagca cctcccctct aaggaagacc atagagaccc caacactgtg ggaccccaaa
                                                                   120
geteetteat geteactgga geteecaceg tgggtgettg caagteetea gegeteeegg
                                                                   180
ggtacagece teceettest geoetetaat gtecteeset ecettgeset tecetesact
                                                                   240
tectttetet geegteeest esteteesat ettgtgaest etttactgge ggggeetgga
                                                                   300
gcccatgatg gacacttgcg gaaggagggg tggcggagca cccctgagat gacatcgctg
                                                                   360
cetgeeccag ageaeceege etetecetgt gaeteagtte titgeageec agatgtgage
                                                                   420
atgtgcaccc tgggacctgc tgcccgttgg gatgcccagg ccaaatcagc ccctctgcct
                                                                   480
ccatgctgca ctgattgcaa gagtttccca catctgcaga ggccgtgggc tcagcccac
                                                                   540
accagecagg ccaccagtgt tgatageggt gaggegggga caaagggaat gteteagtte
                                                                   600
acagtgtgga catggtggag gtctcggcct tgcgagacaa ggcaggggga ggggatagga
                                                                   660
aattgggggt attotgtgac tootgggcca coggggagec agaatottec agccagactg
                                                                   720
gatgggcagg gettagette etgatgeege ceatteacea ettteacec gggaacetae
                                                                   780
840
ctaaaccate ceteacceta acceaateet egecetaace etaatgetaa eccetgacee
                                                                   900
gacccaatcc taaccctgat gctaacccct gactcaactc tcaccctaac cctgatgcta
                                                                   960
accordance caatesteac estaacasty atactaaces ttaacetaac esaacesage
                                                                  1020
cetaaeteca aetetaáage taaeteetaa eeetaggaga ggageeeagg eegggeeete
                                                                  1080
tecctgetgg tttcctgttg ggctttggag ccccagatgc ctgcccagag gcttccttgt
                                                                  1140
gcggggtggg gtccagcagt gggggatggg cccagagctg gtgtagccac cagcagagcc
                                                                  1200
atcotgatoc acaggacoat cootggtggg gtggggcccc ctgggggcagg aaggccactg
                                                                  1260
aggccaggga gactcccagg cccactcacg gcgcaggccc cacaggagct ggctggaggc
                                                                  1320
tatgggtgcg gggcgtgggc ctgccggggg ttgcgtgaca ggcagtgggg agtgggttgt
                                                                  1380
getggeaget gtgggtgagt gaggaggete eteteatgaa gggeeetggg gaagtggaat
                                                                  1440
```

```
etggccetga gagacceccg gecteetetg caggggetge eggcaggagg ggaaccgggg
                                                                     1500
                                                                     1560
accacctece gecacagage etggggeece cageettgee tacagggagg gtagatgaga
gtgtaaactg catatgaggt tgggctaaac ctggacatgt gtttcataac caaagcagcc
                                                                     1620
aggaatetee ggetetgeee agtgateate tgggeaggae atggggaega gtgteeagge
                                                                     1680
tgaagtcagg gcccggccag cagagggcca ttttgtattg agctccacag ctggtcacat
                                                                     1740
tetgtggaat gtgeagaegt geaeggeeea teagaeaggg tetggagtgg ggetgeeate
                                                                     1800
ttgggcaget cetecegggt gtetgcaaaa tgcagaggte accagageca aggcageaag
                                                                     1860
gcaaggagcc cggcttctaa ggaactctga gcaggtgtgg tccatggctg ggaggcagct
                                                                     1920
ggccccacag cacatagcac ggagggcggc gcggagtcct ggacgctctt ggcaggtccc
                                                                     1980
ctcatggagg atgtggggga ttggcttagg cctggtctgg ctggccttcc tggaccgcag
                                                                     2040
tggccaggag ctgaaaaccg tgaccccagt ctccctgcag ctgttcttga tgggatttct
                                                                     2100
gttcgccagt cagatgcatt tgcacaggac ttggatcctg aactgtgtaa cctggagagg
                                                                     2160
caggigigag cgggccatgc tgctggccca gcctgtgccg gigtctgttt cigitgtctc
                                                                     2220
teggecette tgtgagecet cagtaaaget ettegtgett cagteageaa gagtggatte
                                                                     2280
tgtcgtcggc aactctgggg accaaaccc gagcctccc ctccccaga ccttgcagtg
                                                                     2340
ccatggaget gagggacetg tggatecaca getgtggeec eggaaggget geaggagetg
                                                                     2400
aacctgcgtg agccccgcag agggtgcaga gccggcttgt gcaggctccc agcaggctca
                                                                     2460
tgacagegeg gatggttaaa tgtageteet gacagecaac tgttaaggtt teaggeattt
                                                                     2520
ttgcaccagg tgacatgatg gtagcctgaa cgtgaccttg gcagcagtct ctacatcaag
                                                                     2580
gaaactggca aatgtcaaca tgctgggtac cctcgctcct gccgccgcag gctgtcagtg
                                                                     2640
tettecagee cacactgegg ggggeettgt tgtgtggetg ceteceagge tggggegagg
                                                                     2700
gtetecagag accaecateg tgcaggetet tggteaatag cagggtgtgg tgeteetgee
                                                                     2760
aggggacgca ttctccgtgt gacctctaca ccccaggtca ggtcaggatg tgatttgctt
                                                                     2820
ctccagggcc gtgactcact agatccacct cccactggtg cctggtggcc cccgacagcc
                                                                     2880
ctggccctgt ccaggccctg gcctgtccta cagtcacagg tgctggcctg tccctgctgt
                                                                     2940
ceteetgace acctggtget eceggecace etgeeegece ecetgtetee tegggacage
                                                                     3000
etggetgeet ceaettgetg geceetgeeg geceaecete titteeaagee tgeeetgeee
                                                                     3060
etcageteet ggggtgggga ggggagaeet egeettetge etgeagegae teceaeetgt
                                                                     3120
                                                                    .3123
```

```
<210> 5054
<211> 1493
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (961)...(1212)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5054
geccatgact acgccaaact tggcaegagg cetgagteet ttgagcaect gecaectete
                                                                       60
ccagtatete ettttecaet acetgaatta gtagaggaaa ggggagaeae actteeteee
                                                                      120
cagaagcctg agctcaaagt gaaacgggtt ttcagaccca atggcattgc cctgacttgg
                                                                      180
aatataacca aaatcaatcc caagtgtgct cctgtagaaa agctaccacc tcttcctgtg
                                                                      240
tcatgagaac tctaataata agttgatttg gaagaagatt ggagaaatta aagctttacc
                                                                      300
actoccoatg gootgtactt tatotcagtt tttagottcc aacagatact attttactgt
                                                                      360
ccaatcaaaa gatatttttg gacgatatgg accattctgt gatataaaat ctatcctgg
                                                                      420
gttttctgaa aatcttacgt aaaaggtgtt taataatgat atactacttt tttttcata
                                                                      480
```

```
tttgtttgtt tgcaatgtta ctgtaatact atttgccatt gtaaaaggcc agctcagatt
                                                                  540
gtgagccctt tctattggga cagtcctctt ctatatgttt taagtggcca gtaatttaat
                                                                  600
gaatttctgg tttgtattaa atatgtcctt ccaatggata agttctaaaa catacgctat
                                                                  660
cattggccca tgttgctgag gtgcattgtg aacaatacct ttagtgactg tggaactgct
                                                                  720
gettetatea gaagaeetag gatacaagea gecaetgttt ceteegttaa caateagett
                                                                  780
ttagtaacct gctgtggtca gcatagctac aggaaaagtc agcccttgac tgagggccag
                                                                  840
atcatecetg gagtgcacet ctactaagat tttatgaaaa gatgacatgt tgggctgcat
                                                                  900
                                                                  960
geocaggotg gagtacagtg gtcactgcaa cotecatoto cotggttcaa gcaattotoo
                                                                 1020
tatgtcagcc tcccaagtag ctgggactat agtcacttgc caccatgccc ggctaattta
                                                                 1080
tttttagtag agatgaggtt tcaccttgtt ggtcaggctg gtctcaaact cctgacctca
                                                                 1140
ggggatccac ccgcctcggc ctcccgaagt gctgggatta taggcgtaag ccaccatgcc
                                                                 1200
tggccaaaaa ttaaaagatt ttatgaaacg aaatggcttc ccattctttc tattcagctt
                                                                 1260
ctaagtgggc tattcatttg ggctctcctc tttttttgtt ttgttttgca cttttgttca
                                                                 1320
atcatttggg gaaatagcct ggaggtcttt cctgaatctg tttgtagaca taataaaatt
                                                                 1380
tgtgtgctgt gtacacaaaa acataatgta tcttatgaaa gcattaccca acctgtttga
                                                                 1440
gttgagaatg atttggccca cettagattt gaggetttag ttggetgatt tee
                                                                 1493
```

```
<210> 5055
<211> 3886
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3887)...(418)

<223> similar to gi4468339 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5055
ttttttttgg agacacaaaa agtcagagag actttattta aatagagtta atttgaagta
                                                                      60
aaccagagag ttttgtgtgc agaagcattt tgcttaactt agggccatca ccacattatg
                                                                      120
aactegtgtg tgtgtgtgtg tgtgtgcaeg egegegtgea eaggetagtg teettetgtg
                                                                      180
ggtgtgtctg cgtgaggacc catccatgca tgtttgatct ttatggcctc cccctgtgca
                                                                      240
cctgcgccta tggataaggt atagtcttgt cttgattccc agtattcatt ctccttgaag
                                                                      300
aatcctgaca gccttcagtc accttccctt ttccagtctc ccaaaagcaa tggcgcctta
                                                                      360
aatgtgcggt aaggatgagg tgagtcttga ggtagcctag gccacagctg ccccttcaag
                                                                      420
gcaaggcctc agctgagttc aggaaatagg agaacctggc cccggagcaa ccccagaagc
                                                                      480
gcaggaccac gaacgtcctg accccagca gcaagaggcc gcccagggcc ccaaagaaga
                                                                      540
tgccgaagaa cgcgtcgagt ttcatgctca ggtgctcaca gtgctcgccc caggccgtgt
                                                                      600
agatggagaa ggacacacag ctgcageggg geeetetggg caggtgetgg caetggeett
                                                                      660
catggtcaca gtagccccta ctgcacgggg acacgcaggt gaagccgctc tgggggctgt
                                                                      720
agaccaggte gtagecettg tagecatege atetgaagta ageetteage gtgeteaegt
                                                                      780
tragggetgt carategege acgtetteet eggagatggg etggaagace acgtegttee
                                                                      840
tgggctcctc actcctccgt ggaacgtggt ataagaacgc ctccaccacc gcggccagca
                                                                      900
gctggttgtt caggaagtca atgaccgggc cccgagggcg gtactggaac tccgagatga
                                                                      960
ccatccagtg ttggatgggg cttcccgagg ccggtgctgc agaatcgatt cgttccactt
                                                                     1020
ggctgttgcg gagaaaggcc cgcatgtcca gggtccccag tctgtatgcc accgaggcgt
                                                                     1080
tgacctctgc catggaggca ttttcctctt cactgagcaa gagctggatg actcttaagg
                                                                     1140
gaagttetag gttgacagtt ggactgaagt tgtteeeage caggaageag eggetgteag
                                                                     1200
```

```
tgaaggctgg ggggcaggtg cacatgggct gacagcccag agtctgggag atgtagcagt
                                                                     1260
ggccttgatt gtagcagtaa ttcacagggc aggactggtt ctgacacagg aaagagctcc
                                                                     1320
ccagagccgc acagtgccgc ccatccccag tcaggtttgg agggcaggcc tcgcagccct
                                                                     1380
teccaggaac geagtggaca etegggaage aeggeteete aeaggeatee teggageeet
                                                                     1440
cgcagtageg geegaaggtg eccegteac acttgcagec agecacetec agggaggagt
                                                                     1500
tgcccaccet getggtetga ttgtacaaac actggetete tgcattgcaa tggcagacca
                                                                     1560
cagtcctggg ctggagtgca gatgccaagc caatcttggc acttcttgct agaatctcca
                                                                     1620
gagtgaatgg ctccagcgac ttgggtgtcc acagcaacgt cccattctca aagagctcca
                                                                     1680
agteggtgea getgtetetg agegtgaagt tggeateete ageattgetg gtgtaetgaa
                                                                     1740
traggetegt ctgccccttg taggettraa tracargace accattgatg gagggegggt
                                                                     1800
actgattgag ggtggcgttc gcctgctcgt agtttttact gacttccctc gtgtgaaqtc
                                                                     1860
cgatgcttgc gttgcgcagg gccagggtgt catagatgca tgagctatct ccgtcacagt
                                                                     1920
tggagatcaa atgttcagcc caggagctgt ttttttgcag ttgtgagtag aaaacagggg
                                                                     1980
tgaagttgga aggcagctgg tcattcctct tgccaaggag gcctgtcccg ttgatctgcc
                                                                     2040
aggtcattcc aaagtggaaa agcatctcct cagggctccc tggggggaatg gtggagccat
                                                                     2100
tgggcatcct gaagtcgtcc tctggattgt tattccagac ccccaggagc ccctccgtgc.
                                                                     2160
ggttctggta ctcgggcggg aggctggcgg aggcgtggag gatgttggag agcgcgatca
                                                                     2220
cegagaeggt ggeccageeg tegaagetgg eegagaeete agageegttg eggeteagga
                                                                     2280
ggactccggt ggcgttgaac gtctcctggc ctccgccgtc ttcatggtca ggctgaaatg
                                                                     2340
tcacagtctg gttatccagc aggacacgga ttgcgtcgtg aggctcaagg agccattgga
                                                                     2400
ccgtgacggg gcccaggctg ctggagcggt actgagccgc aaaggcgatg aagttggtgg
                                                                     2460
cctgggctga gccagtctgg gcggtgcggc cctgaagcag gaaggaggag ttcccgtctt
                                                                     2520
gggccccgac cagcagaaag tcccccagcc cattgaaggt gtaactgaca ccatccaagg
                                                                     2580
tggtgatgtg ggggtccccg aacatccagg cgggctgtgg gggcctgtat gtagcacagc
                                                                     2640
ccacgtgggg ccgcctctgc tggtacaggg cacagaggta gggcttgtca ttccagcggc
                                                                     2700
agcaccaget etgtggetee agtteetggg ecaactgeea aggacgetge aegtgeeage
                                                                     2760
cttcacgaaa ctctccccag ggcccgtagc tgcagcacac gcctcctcgc caagaggtga
                                                                     2820
agctgcacag ctgcctactg ccgaggcccc agcgacctat gctgacgggt tggaatcgta
                                                                     2880
agtecegteg tecetgetge caggaceaag ggeaggagae etggttecag ceceagetgg
                                                                     2940
gccaccgagg ctggctcttc agccactgca ggcactcgag acggtagttg ggcctttctt
                                                                     3000
cccggtgtag cctgtagaac tgcagccctt ggaggcctga gttggaattc aggaatctat
                                                                     3060
cagggcgata ceteteceae actggetggg acateagtgg getgtttteg aaatageeat
                                                                     3120
ctccactaga gaagcccatg agcaccgggt tgcctgagcg ctgggccacg tcccactgca
                                                                     3180
teccaceget etggtagaga aacagggeat aggacetget eeegteegtg gagaggatgg
                                                                     3240
cttggtaggt gttgctcccg agggtccact gggcaggata ggcgtgggca ttgacccacg
                                                                     3300
tgacetttag ggeeeacetg geettgtage eccegttgtt tgtgatettt etaateeaag
                                                                     3360
actoggootg otggactago aggotgtgtt caccatagaa ogtotogtat tootgataaa
                                                                     3420
atgtggtece cegaceagtg gagaagteag categteeca gaaeggagee aceagggeea
                                                                     3480
cagggteceg geetgtgaag eetgttggga gtgggttggg gtaggagaaa atetggtagt
                                                                     3540
ctgactctgg gaagatgatc tggccattgt ctgtgaagta gagggaatca cggagagagg
                                                                     3600
agccaagggg gaagccagtc gccggcttga agagtgggga ggtgaagtcc acggtcctcc
                                                                     3660
tgacgaactc caggtccccg gcgtctgccc cataggggaa gagggaaact cctctctcag
                                                                     3720
gcaggatggg gatgggggca gctgtggagc gggtgtgcat ggcagtgctg ggaatggtgg
                                                                     3780
aaatgatggt ctgggaggtt gtggggggtg gtgatgtggc tgtgcgtctc ccaccgtctg
                                                                     3840
tetteagtga eggtgttgte atteetgatg ttteéatett eagagg
                                                                     3886
```

```
<210> 5056
<211> 1543
<212> DNA
<213> Homo sapiens
<220>
```

<222> (17)...(528)
<223> similar to gil8218 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

```
<400> 5056
ccgtgtggtg gaattcaaaa ctggcaaaga tgtggccacc caaatactag aaggagagct
                                                                       60
ctttgacttt gatcttgaag ttaaaccagt gttagaagtt ttggtgggga agacaattga
                                                                      120
gcagtctctt ctggaagtaa tggaagaaga agagctggct aacctgcggg ccagtcagcg
                                                                      180
tgagtatgaa gaactacgga atagtgaacg tgctgaagtt caacgacttg aagagcaaga
                                                                      240
gaggcgacac cgagaagaaa aagaacggcg taagaaacag cagtgggaaa taatgcacaa
                                                                      300
gcacaacgag acatcacaaa aaatcgccgc ccgagcattt gcacagcgtt acctggctga
                                                                      360
cetteteceg tetgtttttg geageeteag ggatagtgge taettttatg ateceattga
                                                                      420
aagagatatt gagataggat ttetteeatg getaatgaat gaagttqaaa aaaccatqqa
                                                                      480
atatagcatg gtgggaagaa cagtgcttga catgttgatc cgtgaggtgg ttgaaaagag
                                                                      540
gctgtgtatg tatgagcatg gggaagacac acatcagtct ccagaacccg aggatgagcc
                                                                      600
tggtggtcct ggagcaatga cagagtcact ggaggcctct gaattcctgg agcagagcat
                                                                      660
gtcacagaca cgggagctgc ttttagatgg aggctaccta caaagaacaa catatgacag
                                                                      720
aaggtcatcc caggaaagga agtttatgga agagagagaa ctcttagggc aagatgaaga
                                                                      780
aacagcaatg aggaagtcct taggggagga agaattgtca taggagggaa gcttcaaagt
                                                                      840
catgaaacca atcaacagcc aagtcagcaa gcaatcaggt aatgatgtgc gagtcccctc
                                                                      900
aggttataga aattatgttg tatttagtca gtatgtcttt ttgtgtaatg gactgggcca
                                                                      960
atcaaatgtg ataaaattaa tttgagaatg aaacttaaat tgaattcatt tatttaatag
                                                                     1020
aatattcaaa ggctatattg taattctaat gagaattata tttaattact agctttctat
                                                                     1080
taccattata tgtaaccagc aaatatattt ttccttagcc cttctaattt tgcgggttag
                                                                     1140
ttttttttag taagtatgat atttaatgtt caatatcagt gctgtcagcc atatagcttt
                                                                     1200
tettetetat aggaaaaact attteaceta etgtaagagt gaatgeetag ceaggegtgg
                                                                     1260
gtggctcaca cctggtaaat cccagcactt tgggaggctg aggcgggcag atcacctgaa
                                                                     1320
gtcaggagtt caagaccagc ctgaccaaca tggagaaact tcatctctac taaaaataca
                                                                     1380
aaatttggtg ggggggggg cgcatgcctg taatcccagc tactcgggag ggtgaggcag
                                                                     1440
gagaatttot tgaaccoggg aggcggaggt tgcggtgagc caagtttgca ccattgcct
                                                                     1500
ccagcctggg caacaaaagg gaaactccct ttcaaaaaaa aaa
                                                                     1543
```

```
<211> 2279
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1678)...(905)
<223> similar to gi5902376 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

'<210> 5057

```
<400> 5057
ttttttttt tttgatttta agtcctttaa tttattttga atatcagtaa ttacattttc 60
aaaatatgat ataatttaaa ggtatcagta ccataaatct gtatcttaca gtaggaaatg 120
taagagtaaa cagcctatat acactttgta ctactgacac aattttatgt atacaactct 180
```

```
atacaqtatc tactaatctc cagaaaaccc acctacaatc catctgtctg ggactgtggg
                                                                      240
caagtgggtt ctttctgaga tcagggtctc actctgtcac ccaggttgca ctgcagtagt
                                                                      300
gcaatcatgg ctcactgtag ccttgacctc ctgggctcaa gtaatcctcc catctttgcc
                                                                      360
tectgagtag etgggaetae aggtaeacae caccatgtet ggataeattt tgtatttttg
                                                                      420
gtagacaccg ggtttcacca tgttgcccag gctggcctca aactcctggg ctcaagtgat
                                                                      480
etgeetgtet tggeeteeca tegtgetggg attagaggea tgagegaetg tgeeaggetg
                                                                      540
actgtggaca agttttacaa ataaaccaaa ataaaaatat tctcactttt cagctgcaca
                                                                      600
tggtggaaat gtacatgtat gatgacaaag tcggagatat ttattacgct gaagacattt
                                                                      660
aactttgttc catgccagcc atgagtgaca acgctagaga ttccaaatgg ggaaaggatc
                                                                      720
ctctacagac ggctttgttt aaaatggtta caagaaacat atggcagttt ttaaaatcag
                                                                      780
attocatttt etetatagat tecattegee aagtgeedag geetgeetge caacegtetg
                                                                      840
caaacatgag agccaagttc aacaccttca tgatagcttc titcacaaag ctgacctttt
                                                                      900
eteteageag acaceggica iggatggitg acagatacet ataqiqaatt itaateaatt
                                                                      960
gatctaaatc cttggcttcc tcgacttgat gttgaaactc cagccctgta ctgtgtagaa
                                                                     1020
teetggteat gatgtagttg tgeaagetgt teacgaaatg catgagette actettaaga
                                                                     1080
ggaadatgcg atgaatctgc tgtcttactg gttctttttg tggtccgaac tgagcaactg
tgtcttgttc atgtataagg ccttctttaa gtcgtggttt ttctgcagta ctaaccagtt
                                                                     1200
caccaaaaag taaaacatcc agactatatt ttgcccactt tatttgcaat aagagaagaa
                                                                     1260
acacttgatt ataaattttt tgacattcca aacttataac aatgtccacg ggccatggga
                                                                     1320
cettgtaget gagggteaga ceatetaaga tatgaacagg cagettette ttagetgtgt
                                                                     1380
caacattttc aaaagatata gatagacgtg aactatcttc aggataacgc tgtcctactg
                                                                     1440
cttcttggag ttggacatta agaaaagaca cattctgcca tgtttccttt tctcttattt
                                                                     1500
tatcaaaaat tgacgtgtag aagtcataca tggtatctcc tccttccatt aagaaaaaat
                                                                     1560
tecteatage tigeaagtat tetaceaace tgtaatetti tittagagit igeatgagat
                                                                     1620
ttccacagca atctagatac tgcttgtcaa tatgaggata gaggcaggat ctcagcgtta
                                                                     1680
atticaaaagt ctggcatgte acagatteeg atgatetate cacacataca teaceaceag
                                                                     1740
caaacttete gtgaaagtea etetgeteea aatacateet tgeaaagtta atggeaagea
                                                                     1800
gtggatcatg aacatcatcc agttcaagat ggctttcagc aatggactgc atcttcatca
                                                                     1860
ggtteteett ggttgeetgt tgeteagtaa gaacetgtgg agtggaatet tetecatqte
                                                                     1920
gaagacggga ctgtacagat tccagaaaga gagtgtataa actttttctt tctgcatctc
                                                                     1980
tggctcctgc ctggcaggtg gtgctctccg cacactgcag gttcttcagc agctgcateg
                                                                     2040
acttgccage cattatgate tgettcagga caggtttgag gaaggacace atggtgtget
                                                                     2100
gcctgctgga gggcccctgg tcactgccgg aactcgcact agcgttatca ctcattttt
                                                                     2160
cttcattttc tgtcttttct gatacgctat ataacgtgta agttgcatac cagaagtctc
                                                                     2220
tgtgattaac tggaacattt ttgtttctct ggatgatgaa ctccctggcg ccatcccac
                                                                     2279
```

```
<210> 5058
<211> 646
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(321)
<223> similar to gil850831 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5058

cgttggactt ggattatcaa aagtggagca gttccagcta tccatttcca cggaagtcaa 60
gaaaagtatt gacatacctt gcaagatatc gagcacaagg tttgaaacag atgtcattca 120
```

```
ctggtaccgg cagaaaccaa atcaggcttt ggagcacctg atctatattg tctcaacaaa
                                                                      180
atcogcagot cgaogcagoa tgggtaagao aagcaacaaa gtggaggcaa gaaagaatto
                                                                      240
tcaaactctc acttcaatcc ttaccatcaa gtccgtagag aaagaagaca tggccgttta
                                                                      300
ctactgtgct gcgtgggatt acaccatact agaactgttg aaacaacatg cacaaaatcc
                                                                      360
cctcccaggg tctgtgccca ccacatcctt cccaacaggg gcaaccacag ccagtcccca
                                                                      420
qctqqqctcc caqactcaqq ctcgccttct ctqaqqctct tccqqqqctt tccaqqaaqc
                                                                      480
tgttatgggt tatacetteg tteccaeetg ateccaggae ttgtgeteca gaatetttat
                                                                      540
ttgacactgt ttcttaatgc attaaagact tgtctgggga ctgagagaac ataggtcgtg
                                                                      600
ccactgtcca tcatatcacc acctagagac ttccagtaag tagcaa
                                                                      646
```

```
<210> 5059
<211> 481
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (469)...(273)
<223> similar to gi2266432 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5059
ttttttttt ttagctcatc agctatcgtt agggtatttt atgtggccca agaaaattct
                                                                       60
tettcaaatg tggcccaggg aagccaaaag tttggacacc tgtgatttac aggttatgcc
                                                                      120
tagatetgaa acagateeee ateeeteeta aagetgeeea etggttatgg geeetgttte
                                                                      180
tcttagaaac accacaca tcatttggga aaagcacact gagtagaaac atggcctgaa
                                                                      240
agggtggtgg gcggtggacc tggcttcctg tggccagagg tcagcggacg atagaaatgg
                                                                      300
tetgategge cacageaaag aetggggaag attgggeece gggaaggaca cattgattgg
                                                                      360
gcacagagca ctgtgccgga ggctggctca tagaagagca gctcctgaac ctgcaagtcc
                                                                      420
ageactacae ecagetggge tgggccccge ageageecca ggggctcgtg etgcccattg
                                                                      480
                                                                      481
```

```
<210> 5060
<211> 1026
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1022)...(245)
<223> similar to gi4159885 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5060
                                                                       60
catattcaaa ccatctttat ttacaaaata ctatcctgag aactattatt ccattaaact
                                                                      120
tcaatttgaq caaaagtgca atcacttaag taatagcagt tacttaaact gaaaatgaga
                                                                      180
tcaqtcaaaa ttacttttga agaaagcaac aatattgtca ggtttcttgc tgtggttctg
qatqtccaqt agcaqgctcc tttgaaggcg gaatcaatcc tgaagggaac tcgcttctac
                                                                      240
ctttagaatg tggggttggg gtaaaatcca ggtctcggat gaaggtaagg aggtaaaccc
                                                                      300
                                                                      360
ctcggtggat agatgtttct cattgcaaat ggagcatgtg gtggacctgg gaaatccctt
ggtggaaaat aacctcgaga agctccaaac atggttcctg gaggaggtgg ggggaaagga
                                                                      420
ggtcctcttc tcatgaacgg gccccttgta tccactggaa acaatggacc gctgattgga
                                                                      480
                                                                      540
gcaagaggtg gaggaataag gccagggcca gttgcttcat tttcagcagg gagagatgaa
tcaggcacat ttaaattacc aagatcatct ttggcatcat ttctactgga ttccatttct
                                                                      600
gaaggcattg acctatecat tttatecaaa gaagtcattt taaaacttet gggttetget
                                                                      660
ggcccagaca gtctttcaga attagaataa aatctgtctt ccctttgtgg aggaagagtt
                                                                      720
gaatcaggat atgattgccc tggtggagga aacatcatcc tacggtcctg ttccaccgga
                                                                      780
gatgacaggg acccagtgtc agaaggagcc ctgtgaggat cgattaacct gtcatagctt
                                                                      840
ggttctcctc tttcattggt aatctgatgg tccaggggat tccctgggct gcttgggcct
                                                                      900
cttectecte ceeetggaag cacaggtgag agtetgagtg gateetecaa caaagtttga
                                                                      960
ggagagggaa aagctetegt tteagatgaa ggeegaeeea atggtgatgg aetagatggg
                                                                     1020
                                                                     1026
caaata
```

```
<210> 5061
<211> 572
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature-
<222> (14)...(205)
<223> similar to gil304434 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5061
tttttggget cegggaceec egggagtggg ageggeagte ggggaegeet caactegtte
                                                                       60
actcagggaa tectgeecat egeettetee aggeegaett egeagaaeta etgeteeetg
                                                                      120
gagcagccag gccagggegg cagcaccagc gccttcgagc agctgcagag gtcccgacgg.
                                                                      180
egecteatet eccagagate tteettggag accetggaag atattgagga gaacgeeeet
                                                                      240
ctccggagat gtcgaactct ctcaggttca cccagaccaa agaattttaa gaagattcat
                                                                      300
tttatcaaga acatgoggca acacgatacc aggaatggca gaatagtoot tatcagtggc
                                                                      360
agaagateet tetgtagtat atttteagtg etgeegtate gegacagtae eeaagteggg
                                                                      420
tatgtatatg catgcatgct ttgtagttct ctgggtgaaa agatctcaca ccaatgtaca
                                                                      480
taatgtggcc atcettteca ttttcaagaa gttgeettge tttgataetg caaatteagt
                                                                      540
atttgtacac tggaatgata aaaagatgtt cc.
                                                                      572
```

```
<210> 5062
<211> 881
<212> DNA
```

```
<213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (116)...(643)
     <223> similar to gi2792494 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5062
cgcgtggggg ttttatatgg acctttggaa ggctgtttat ttacccaatg gaagaaatcc
                                                                       60
ttcatttctg atttcgagct ggcatcgtga cacatttgga cctcagaaag actcttctca
                                                                      120
agttgaggag ggggatgatg ttettgacaa attacttgaa aacattggee atacaagtee
                                                                      180
tgaatgeett ttacegteac agetaaatet aaatgaacet teeetaacee catgtggeat
                                                                      240
gaactatgac caagagaagg aaatcattga ggtcattttg cgccaaaatg ctcaagagga
                                                                      300
tgagtatato cagagtoata acttogatto tgoaatgaaa gtoaccagoo aagggcagoo
                                                                      360
ctccccagtg gagcctcgag gaccctttta tttctgcagg ttattgcttg atgacttggg
                                                                      420
aatgaattot tgggacagaa ggaagaattt toatotattg aagaaaaatt caaaattatt
                                                                      480
gagagagetg aaaaatttgg acteeegeca gtgeegtgag acacacaaaa tegeagtgtt
                                                                      540
ttacattgct gaaggtcaag aagacaagtg ttcaatcctc tctaatgaaa gaggaagcca
                                                                      600
agcatatgaa gactttgttg ctggacttgg atgggaggta atgcatttca ttcaggaggt
                                                                      660
gtttattgac cagcactgtt taaagatgtg tccaaactag acattgtgta agtttttaca
                                                                      720
tgtgcttttg cattcaaata tagcatagat agagttctgg aattgaagaa tttattggat
                                                                      780
ttgacatctg ttagttgctt gtcagtattt aatacatgaa cttttgtttt cctttaactt
                                                                      840 .
tcctcttaat attttttcat ttgcttttta tcagaactga a
                                                                      881
     <210> 5063
     <211> 2941
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (15)...(472)
     <223> similar to gi4689112 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5063
tttgggagge tgaggatgte agtgggggag gacccgcacg ttettaccca gttggaggee
                                                                       60
tttgttacta tctttctcct cctgagtcca tgggcgccat ctttgaggat cctgtccatg
                                                                      120
tegttgttta tateatette atgttggggt catgtgeatt ettetetaag acatggattg
                                                                      180
aagtgtetgg tteeteagee aaagatgtag etaaacaget gaaagaacag cagatggtaa
                                                                      240
tgaggggcca ccgagatacc tctatggttc atgagcttaa taggtacatc cccaccgcag
                                                                      300
ctgcgtttgg cggtttgtgc attggcgccc tgtcagtgct ggctgacttc ctgggggcca
                                                                      360
ttggatctgg cactggaatt ctgctagcag tcactattat ttaccagtat tttgaaatat
                                                                      420
ttgttaaaga acaggccgaa gttggtggga tgggtgcttt gtttttctaa atgttcaaat
                                                                      480
```

540

600

atttcatttt gtgcgtgtga aagggaaaac actttgacgg atcgtttttg tcagatgaca

ctggtggctc cccttttctc ccctcacagt ttcttgtttc gagtgctgac tgacccgttt

```
ctgaaatqqq caccgagcta agtctgtgtg cagcattagt acccgctgcc ttaaaactca
                                                                      660
agtttacatt attcattaaa aaaagtacat ctagtgttgc ctgtaatgct ggaaaccagt
                                                                      720
                                                                      780
gtatctacct tgctgtgtta aatcatgaca gtgagacggt gagatggatt cgttttgcac
acaacattca aaacacttca tattgccccc acttgttgaa aaataaatgt agttcaaatt
                                                                      840
gecaetttee agtatttttg agettattta atgagttetg gaacatttat atetaateta
                                                                      900
tattttagat aattactttt tatacttttt taactcatgg tatccccact ccccacccc
                                                                      960
acctcatttt tatttgtccc ttctcaaagc agccacttag cccacatggg cgaaatcaag
                                                                     1020
tetecagtta tttetgecae aactgettet aaggeeteet cetteteete etectettee
                                                                     1080
tetteeteet ttteettete etecteetet etteccagtg acageateat egtgetgttt
                                                                     1140
geetgtattg getatgeett etaacteeaa eeagteactt gagaatatte ttteaagatt
                                                                     1200
ctgggccccg attcttttct gtttaaatcc ctaaagcaaa gatctaattc tcaagcaatg
                                                                     1260
tetgtagtte agtgggggtg aacaatgaat atatteatge taggaatttg tgtetgttgt
                                                                     1320
tqtactcaca gcagcaacat gagtgtaaac agtagacaat aaacttttat ttaagaaaac
                                                                     1380
tgattcagtt gtgttggaaa aaataaagaa atctgatatt aaacgttttc taagatcatt
                                                                     1440
tgtataggtt cagtgtattc ataagaagtc caccetgaga tgcctgtaaa agtcaaatgt
                                                                     1500
aattacactt caaactttaa tootaaatta ttgacagata gatagatagt gaccaactta
                                                                     1560
agggtaatca tatatgtgac taacatttgg gaggaaacag gaaaacagtg gtctcaaaac
                                                                     1620
aacaatatcc cagtctccat ttgaaagagc atagatcttg gtaaatcatt ttgaaaacta
                                                                     1680
tgtgctttat ttcccaaaag atcaaactta atttttaaaa gacacccttt tcagaagtat
                                                                     1740
gggttttcat tgctgtttag tttcttaggt gtggtatgtc ttacgtagct tatgcttaca
                                                                     1800
aagccaaata atcgcagggc aaggcagata aaggcaggca ggatagtgac agtggctcgg
                                                                     1860
tgagcatccg ccaagggcct cagaccactg ttaccataaa aacatccacc cagtgttatg
                                                                     1920
acgtccgatt tttttttccc ttaagaaggt ggaaatatgg cttttaatac ataggaaacc
                                                                     1980
ttcagttttt aaatgcaggg caaataaaca tttttaaaca gtgccagcca gactgccagt
                                                                     2040
teteaaacag actgaattte eaaageacaa eetttteatg tttataaaaa atagaaatgg
                                                                     2100
catttaggga tacattctag gatttggctc tgacttctaa gttgcactct taggaagaag
                                                                     2160
gagaggataa gcttaggtca gctgcagagg tcattcccat ggggagtggc tggggaggaa
                                                                     2220
ctgggctatg tggaaagact gggctgcgcc cgtctacgga tgccttctct cttgatttca
                                                                     2280
atgattgata gcatgtggct ttcagaccta aggaagagtt agagctttgg agaatcacaa
                                                                     2340
tgcctgtgat tgaaatcagg atttaaaaaa gggttagagg cataggggaa ggctaccatt
                                                                     2400
acaggaagta gttggatett aatttteaca tgtataggge tagacagett catetgtaaa
                                                                     2460
gttctgtatt tccataattg ttttatcttt aggaagtcca gtgtaaagat cttacagttt
                                                                     2520
cactcataaa aatatcctgg gctcagacag tgagcctgtg gacaaacgga ggctactgca
                                                                     2580
geattetgge attageacte tgattttate tggagagece ttteatatgg tteteaggge
                                                                     2640
ctggcttacc cgctggagcc aggctagaaa catgacttag ggctggatga gaatcatcct
                                                                     2700 .
gagaatteeg tgggggeeag aetggaaagt eetggaaaat eatggagetg etggaggeee
                                                                     2760
taaaagtcaa cacaaaaaga gctaaactca ctcaagaagc taagaaaatg gcccaggaac
                                                                     2820
actggtagaa ctgctagatg acagggtttc aggcatggga accagatcaa tctgtacttc
                                                                     2880
ttgctgtgaa ctactctgta ttgggtttca ggtactggct gatcttgctg gttctgttca
                                                                     2940
                                                                     2941
```

```
<210> 5064
<211> 3447
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3448)...(706)
<223> similar to gi5911875 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5064 60 ttcatgtgcc catcggaggg tacatatcag tctatttttt attataaaca aataaaagat taaatcacac atcaaagacc tagactcctt ctctgagaca ccaaaggcct aacaaccagt 120 aagataattt tagacaattc tattgaaagt tattcaaaag gcatcaagtc aaaataacga 180 240 aactgcccca gtaaaaaggg gctgggcctg ggggccaggc aaaggcaagc atgagggccc cagtagaggt ggacctgtcc ctatggtaac tgagctcggc tttaaggcca ggcattgggg 300 atcagctgct aggageceae ctgtgttett eetgaggggt gggggeaece tagteaettg 360 420 cettagagge acatgggtee eccaccagee tacageatgg aaaacaceca atgtetgget ctagcctatt cttaacccac aaactgggat tgggagctgg ggacaggaag aaggggtcat 480 ggggccagga gcctattcag gctctacaac cagacttccc tagagaggcc ccgtgccagt 540 tagtccaatg gccacacaca tcagaaaggg tagtcaacag cgttgcacat gtaggttgga 600 ggtagcccag gtgtcagcca caccctggtc acagcagatc cagagaggca atgttccttg 660 gagetgeagg etgetggate tactgetegt ceagteeegg geteagaeae agggtaagte 720 780 ctecaggece ctacceaggg cetgecetga cacacagetg etgteagage caetggagee actggctgat gggcattggg acgagatete tgagteetea geagteaaag agggetggee 840 geceagetet geeteageet eeagtgetge tteetetggg aagetgggat acaggggaca 900 geggagaeee agaagagetg ggtetetgta caggtgeagg ttgagggaee eeagaacaga 960 gcaagaggca gggtctccag gaagggagtt cgaggccccc aggtagaggc tgtcatggtc 1020 aaacggggct acggcaatgg acgcccgaga gcgaacttct cggcacttca ggacatagtt 1080 1140 gacggtgcgg tcgttgatgg cttcctcgct gggagcaatg tctcggaagg ccttgttccc cacacccatg gacaccatct cagccatgcg cacctccttg ttgtggacgg cctgcctcca 1200 aagcaggtgg gagatgtcag ctgtccaggc ctgcttgata gccaggctgg aggcctgcag 1260 cacaaaggtg tccctggcct tgcggcggcg gaaccagatc tcgaagcgca ggttgctgtt 1320 cccacagcac tcagtgagac caaggtctgc catcttgaag gagcgcttgt aggcaaatgt 1380 gtcaacccct gtgggcccat ggcgaggctt gctgaagagc agcagctcct: caaaaaggaa 1440 1500 gatgeggege aeggaettgt ggegeeeagt gegeaceaea aacteateet gtegeaceag etgeceetgt teettgaggt taacateaca geeetggatg gegteeatgg eeageaggte 1560 gtttccgtgc cgcagctgga agtgcacaag gctctgggcc tcccgcagcg cactgagctc 1620 ctgcgtgggg ccccgcagg cccgtgccag ctcctgcagc agcagtgcgt acttgcccat 1680 gegetggatg ggetttagea ggtaggagge eaggteeagg tggteeceea gtgettgetg 1740 cttgtccttg aagaaggtgt gcccatagct tgacatcagg gcatcggagc gaggcttatt 1800 cttgctgtag agcgcgtaca tcccaaactg caccctatgg cgcaggaagg cataggccac 1860 tegtggtggg tgeegggtge aageeteeag eteaegeagg aagaagtgge agtggaagte 1920 cegcagette tecaggitige caaagaggitg ggeacgetga cegeggagge cetggggeac 1980 atcggggcga tccagctcgg ggaaatagtt ctccatagtg tactctagag cccggacata 2040 etceegetee gtggccacca tetetgecag caccagetgt ageetgttga ggeteetggg 2100 gtcagagctg cctggtggag gcacagtagg ggatgcctgg ggcagggcac ctcctccagc 2160 ctctggtctg cggcaggcag caatagtggc cgcatggtgg cagtggcagg caggttcact 2220 gagactetge eccagattee gategaaget gtaggeette etcaggggag ggtgggeagg 2280 tgcagcgggg acctggctga cacacaggct agctgtgctg cccaccggtg gtagcttcag 2340 tgaagcetca agettttggt ccagggecag ccaggtgtee tggcaecgeg eccaggeca 2400 geggeactee tggeggatgg cetetgagee cageceegtg gecagageee acatettteg 2460 gaagtgggca ggaggcaagt cagggtgcct ggtccagtgc agctgcagct gctgcaacac 2520 aacccccggg cgttcctgct ccagctctgc caacactcgc tgcccctcct cagcccacgt 2580 caaggeetee etgaagaget gaaacageet eteageatee geeageeget ggeacegetg 2640 ggccaaagcc ctagagaatt cagtcagctg ggctcgcagg gccagaaagc gtgccccagg 2700 ggggtccagt tcagccgcct cccagccagt cagcggctgc agaaacttct ccccttgcct 2760 gacctgctcc tgggcaacct ggtacagctc ctgaaaagag ccttgggcct ggagcagcat 2820 gtccagcgag ggctccccag cctcctccag tgctggccag cccacctgct gcagccacac 2880 ttcaatctgg tgcagtccgc tttcccgggc ctccagtgtt tggaccaact ctagggcctg 2940 tattcgctgg ttgctctgca gggtcagttg gtgcagcaat ccatccaccc ggtcatatag 3000 ctegtcagec ttgtccattg cegtcctgta gtctgggctc agggtcacct ctgggacctc 3060 ttgcttcagc catgtcagct cccggcccc ctggcattgt agccatgcca gccatggcga 3120 gtctagcacc tgctgcatca ggacctctgt ctgctgtagc agctgaccga cctccccagg 3180 ctccatgggc tggggcacag ccttcacact ttcgatggcc ccctggagca gggcacaagc 3240

```
tgcctggcag ttctgtagta gagcttccag ccgccttcgg aaatccagcc aggcctggtg
                                                                     3300
gcagtaaggc aggcctcctc ctagcgaagt gggcagcccc gccgttggga tgtgggtcag
                                                                     3360
caggetetga gaaggeaact getecagetg cageeggaa ggeaetteet teageagegt
                                                                     3420
gcttcccact agcagcacct ggtacac
                                                                     3447
```

<210> 5065 <211> 467 <212> DNA <213> Homo sapiens <220> <221> misc_feature <222> (46)...(165) <223> similar to gi2439972 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5065 attattagta cagtgoggtg gaattootac cocattooca tattocagat cotgtgtato 60 gatgaggeca cageaagtgt ggaccagaag acagaccage tgetecagea gaccatetge 120 aaacgctttg ccaacaagac agtgctgacc attgcccata ggtatgtaaa cgcctggtaa 180 cagectaate agggactgtg gtageatgea cegagageet cegttgettt cagggaceee 240 agtggtcagg gccttagaga tcctgcccc ccagatetca gctcctcctt ctccagggac. 300 gagaagggtc ctttatagca ctgcctaggg ccctttatag cacattatct gagggccctt 360 tatagcactg cctagggccc tttatagcac attatctgag ggactctgca gtcccttccc

cagcaccaag ccaggggcta aagcctgtgg ggacagacct gtggtgt

420

<210> 5066 <211> 1229 <212> DNA <213> Homo sapiens <220> <221> misc_feature <222> (1)...(579) <223> similar to gi3599942 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5066 gagaagcaga gctgtaagag ctgtggtgag acctttaact ccatcaccaa gaggaggcat 60 cactgcaagc tgtgtggggc ggtcatctgt gggaagtgct ccgagttcaa ggccgagaac 120 ageoggeaga geogtgtetg cagagattgt tteetgacae ageoagtgge ceetgagage 180 acagagaaga cacccactge agacccccag cccagcctge tetgeggece cctgeggetg 240 tragagageg gtgagaretg gagegaggtg tgggeegeea tecceatgte agateeceag 300

```
gtgctgcacc tgcagggagg cagccaggac ggccggctgc cccgcaccat ccctctcccc
                                                                      360
agetgeaaac tgagtgtgec ggaccetgag gagaggetgg acteggggea tgtgtggaag
                                                                      420
ctgcagtggg ccaagcagtc ctggtacctg agcgcctcct ccgcagagct gcagcagcag
                                                                      480
tggctggaaa ccctaagcac tgctgcccat ggggacacgg cccaggacag cccgggggcc
                                                                      540
etgeagette aggteectat gggegeaget geteegtgag etgagtetee eactgeeetg
                                                                      600
                                                                      660
cacaccacca cattggacct gtgctgtcct gggaggtggt gttggaggcc ccatgaagag
                                                                      720
cgccctggac tgctgagggt gggccaacag cccagagctc aggacacttg gctttggggg
                                                                      780
gaaggaaact gaggcccaga gaggggcaac cactggccaa gggtcaccca gcaagttttg
getaagagee tggeeteeag eeccageagt gtggeeeaga geaggggeeg actgeeaaag
                                                                      840
taaccatcat ccatatgggc cgtgtggtga tgctggcccg gaaggcagaa agaggcagca
                                                                      900
tgggcactgc cagggacagc cacatcetgc tggtctgcag cgtggtccac cccgcctctg
                                                                      960
cccagcctgt ctacaccgtg tgagctgaat cgtgacttgc ttcccacctc ctttctctgt
                                                                     1020
ceteteetga ggttetgeet geageeecca ggaggtggge etgeeecate etagetggae
                                                                     1080
tcatggttcc taaataacca cgctcagaag ctctgctagg acttacccca gccactgagt
                                                                     1140
ggcaggcgca tgagatttgt ggctgttcct gatgctagtg gcacacagtg cttatctgca
                                                                     1200
taaataaaca ctggccacca aaaaaaaa
                                                                     1229
```

```
<210> 5067
<211> 525
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (76)...(205)
<223> similar to gi2286147 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5067
ataggggagg cgtgggcact tgtagttgtc ttaggactga tgtctgaatt aactaaggga
                                                                       60
acttgtctgg tttgcagagt gctgatggca gagattggtg aggatttgga taaatctgat
                                                                      120
gtgtcctcat taattttcct catgaaggat tacatgggcc gaggcaagat aagcaaggag
                                                                      180
aaggtgagtt ttettetttt ggtteatgge eecaggagee tateagaagt gggagetaet
                                                                      240
cttgttgata cagagagag gaagcaggca gtctgccgcc actatagtgg gagtcagaca
                                                                      300
tctcaggtgg cttttaaaca acatgaatgg gaagagaatt ggtttatgaa tigaagaaat
                                                                      360
aggattataa catcttctgg tgtgggcttg gatggttctt tcatccttgg aatttatcct
                                                                      420
tgtttctgta aaattcatag gtctggctca tatgagcttc cctccctggc ttgatgggga
                                                                      480
tgtggggaag acatcccatc tgcttgtgct gagggaaaac aggag
                                                                      525
```

```
<210> 5068
<211> 1065
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (1067)...(869) <223> similar to gi404650 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5068
ttttcacaca tataaacaag tttattagat tgtcagtgat actttgagac aaattcaagt
                                                                       60
tatttcattt tacttcatat aaacagagga agggaggaaa gttttaaact tcaagctttg
                                                                      120
ttcagcatgt gtgcagttag catccacaaa agcaccattg ggtatgggag aattagcacc
                                                                      180
acagaatttt aggacctaac tgttaacatg catcactgaa aaacttggaa cataaaaact
                                                                      240.
gaagtagtac gtggtatggt ctattataaa caatacaagg caatttatga tttgttctca
                                                                      300
                                                                      360
tacagtacaa tacaatcaca ataaatgaga accttttaag aacaatacgg gacaaaaacc
accttgcacc ctgttaacac taaagcagtt acagatttaa aaaaatgttt ctggtaagag
                                                                      420
gcagtgggtt gaaattatcc ctccccctc aatttttaaa ttcagagtta tatagttaca
                                                                      480
tgatetetta agaaagtatt tteaaateta tatgtetete taeeteaagg etgacaaatg
                                                                      540
gtggtttgaa aacgaaaggc ttgatgaatt aaaaaaaaca aaacccaaaa actggataga
                                                                      600
gtcgaaaggt acttcaatgt ggtggaaatt attcaacata agatcagttt ggaaatgatg
                                                                      660
ccagtggtgt tgatacttgt cttcccttcc gtggaggaat gtcaagtact gaggccttgc
                                                                      720
atteatgatg aactteagtt catttettte accgaatgee tttattetga ggtgtaacat
                                                                      780
aagagattta ttoottatto otcaactgtt tttgtagtat catggggctg ttoottatgo
                                                                      840
                                                                      900
ttgatttgac aacagtgaaa aaggttgata ttctctctgg atttggggta atttgtgagc
ttcaggaaaa ttccatattt attagagccc acatcaaagt agaacctttt attgtccact
                                                                      960
ctgaaagaag teeectetgg gagtteaage gggteategt eteeacetet tegttettgt
                                                                     1020
atgtctcctt cgccatagtc ttcaatcaaa aaaaccaagg catca
                                                                     1065
```

```
<210> 5069
<211> 974
<212> DNA
<213> Homo sapiens
```

<220>
<221> misc_feature
<222> (8)...(484)

<223> similar to gi2992628 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5069 ageggeegeg atgggtggeg ceatggteet getetatgee ageegggeet getacaaeet 60 gacagcactg gccttggccc cccagagccg gctggacacc ttcgattacg actggtacaa 🔍 120 tgtgtctgae caggtgggca tacgcatgte tgccacctce ttagtageeg tggcaccttg 180 gececagetg geetgggeee ttgteeeact acceetttgg egtgaetgea gaetggeace 240 agcccctgcc ttcccacagg cggacctggt gaatgacctg gggaacaaag gctacctggt 300 atttggeete atectetteg tgtgggaget actgeecace accetgetgg tgggettett 360 ccgggtgcac cggccccac aggacctgag caccagccac atcctcaatg ggcaggtctt 420 tgcctctcgg tcctacttct ttgaccgggc tgggcactgt gaagatgagg gctgctcctg 480 ggagcacagc cggggtgaga gcaccagtat gtcgggcagt ctaggctctg ggagctggta 540 tggtgccatc gggcgtgagc cgggctggta tgggggcagc cagacgaaga ccactcctct 600 getettetee caggtgecag gaccaggegg ccaccaccae agtetetaet ccacccaca 660

```
gacgtgatce cectecete cecacagaat acceaggee cagtecect caccetagge 720 cectgtgee agtttgtetg cegettettg eccaggatee tgggggtegt ggetacecee 780 tectetggee ggeteettge tgeteetgte atagtgaget tgtgeegtee cectaggatg gggggeatgg cectggetge cagatgeea cagcacetg geatgacetg caccetetge 900 tecacacagaa aaaa 974
```

```
<210> 5070
<211> 2398
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2120)...(1639)
<223> similar to gi3881700 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5070
tttttttttt ttagattatg tatatgaaaa etaatttatt aaacetetgt acacaaagat
                                                                     60
gaacatacct gtatagcaag catatatgaa ggatgaagtt acaaaaaagt aaaagtatta
                                                                    120
ctaaaattga cacatgtaaa tcacttacaa aaatacccca aatgggataa agctgctcat
                                                                    180
ccctgatttt tctcatttgg ttgtaggagt tgaaacatga atttaaaatg gtagaatttt
                                                                    240
ttottttaaa aagtgatata ttaaacttat atacaggata attagcaaaa tgtagaaagg
                                                                    300
gaaaacaatg tacaaaagac agataaaaac catcactctc gacggatagt cacaatccaa
                                                                    360
aaatagtata aacettaaca aaceetetet aaaceaggte atatteacat eteceecaa
                                                                   420
gttttgtcag tgagaataaa atatactgaa ctagtgaget cagtetttet ttaaaatagg
                                                                    480
cttgactttg gaacatgaac cttggataga tttttaaaca tgggagggac aaacaggaaa
                                                                   540
accattetat etatecaett aattagtaet aattaaegga acaaagttat taaatagete
                                                                    600
tragtgreaa gtraagreat tattragagg cotttttgtt tttctgregg tttrggggtg
                                                                    660
agttetttaa eaagettett ateetgaggt acattecagt agattetgee atatteteaa
                                                                    720
attcaaatgg cgtgattcca gttgcaaatt tgctcatgtc aggtataggg ctatgaattt
                                                                    780
tagtggccgt tgaaggactg gtgtctgcag gaaagagctt ctggctgccc ccattgctga
                                                                    840
tgtcacagtt tggtacgaca ctgccattat caagaagggc accttcagtg tttaccggag
                                                                    900
ccaactetge tittteette tgacaaagtg atgtcacete agagtetgga etggaggeat
                                                                    960
gtccagcttc tgatttcttt gtaaaaatct ctggtacctc aggctcatcc agcgtctgct
                                                                   1020
tttcagatgt ttttccctcc gggacaggga ggtctagctc atttggacaa ggtgatgagg
                                                                   10807
caacggaatt gcccagttaa aggtgtgtcc cacaggaacg tcggaagtcg ctgttttacg
                                                                   1140
etecteggee tgetcaagag etgeccaga tecgectetg etgitectic ecagtiette
                                                                   1200
1260
tgggagtcag cggcggggtg ccctttggga gtggagggt gaagacgggt ggaggagttc
                                                                   1320
cccgggggag tggaggagtg tcaggaggta atggtggttg aaactgaaaa ctttcgctgc
                                                                   1380
tetgagaace atgtggtace tecatatetg aategagete catgteggeg ggagateceg
                                                                   1440
ctgagttgct ttcattcttc tgcttctttg gactacctgg gctagagtga gatgaagacc
                                                                   1500
tettgttgee agaetteaea eetggegett ggaagttaga agtaaggtaa ttggeaaaea
                                                                   1560
catcettetg etgacatgee tgeattggta tggaaccaaa gateetecat tegtetggaa
                                                                   1620
ttcctctggg agtagatata ttaaaaccag gatagttgac caattttgag agatcgtaag
                                                                   1680
tgacactttt attetgttgt atttetedaa ettetgttte cedateagtg ceatetttte
                                                                   1740
catcatagag tgcaagcccc gaatteteca atteageete tttgageeac cetggtgggt
                                                                   1800
accetagetg gegeateega tagataaaag gtggaagaet ettgtetgte acacetagtg
                                                                   1860
```

```
catcttgaag ttcctcacta ataactcctg gcttgaatct tccaaatctt tcttctactt
                                                                     1920
cttctgcgtg gtatcgctgc tggaaattct.gattgtttgc ttctccacag gcatccatat
                                                                     1980
actictitict ctittcactt atticgaging catticgagg cattigggina totttcattt.
ggtgttcttc agaaccacaa ttgagacagt gaggctttgg cactgaaagc ttccttgttg
                                                                     2100
tttttaatgg cacaggactc ttccactttg tggtcctcct ctagcacaat actggatggt
                                                                     2160
ttgaaatagc attgttcatg aatagaatct gtaatatagg tccatctaac ttagtatcgt
                                                                     2220
tcaccaatat tccactcggt cgagtcagaa tgctcaattt tcgtttaagt tcttgattct
                                                                     2280
eggegeggag etgetegatg gteteetege actgeegaag eegeteeegt ageteegegt
                                                                     2340
egeegaeeee attttegtee teetagtege egtegtegte ettgaagega gtaegaaa
                                                                     2398
```

```
<210> 5071
<211> 778
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (103)...(605)
<223> similar to gi3395780 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5071
ttgctgccgt ttaaagctgc ttcagaattc atcctaggga agagtgagct gggacaagaa
                                                                       60
accacccctt ctttcaatgc aatggtcgtg aacaacctga ccctccagat tgtccagggc
                                                                      120
cacattgaat ggcagacggc agatgtaatt gttaattctg taaacccaca tgatattaca
                                                                      180
gttggacctg tggcaaagtc aattctacaa caagcaggag ttgaaatgaa atcggaattt
                                                                      240
cttgccacaa aggctaaaca gtttcaacgg tcccagttgg tactggtcac aaaaggattt
                                                                      300
aacttgttct gtaaatatat ataccatgta ctgtggcatt cagaatttcc taaacctcag
                                                                      360
atattaaaac atgcaatgaa ggagtgtttg gaaaaatgca ttgagcaaaa tataacttcc
                                                                      420
atttcctttc ctgcccttgg gactggaaac atggaaataa agaaggaaac agcagcagag
                                                                      480
attitigting atgaagitti aacattigcc aaagaccatg taaaacacca gitaactgta
                                                                      540
aaatttgtga tettteeaac agatttggag atatataagg ettteagtte tgaaatggea
                                                                      600
aagaggtcca agatgctgag tttgaacaat tacagtgtcc cccagtcaac cagagaggag
                                                                      660
aaaagagaaa atgggcttga agctagatct cctgccatca atctgatggg attcaacqtg
                                                                      720
gaagagatgt gtaaggccca cgcatggatc caaagaatcc tgagtctcca gaacgaaa
                                                                      778
```

```
<210> 5072
<211> 1824
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1825)
<223> n = a,t,c or g
```

```
<220>
<221> misc_feature
<222> (2)...(389)
<223> similar to gi4567180 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400>.5072
ccagagacac cacctggagg tgcaccagcg cagccacact ggggagaagc cctacaagtg
                                                                       60
eggggaetge tggaagaget teageegeag geageacetg caggtgeace ggaggaegea
                                                                      120
caccggggag aagccctaca cctgcgagtg tggcaagagc ttcagcagga atgccaatct
                                                                      180
ggcggtgcac cggcgtgccc acactggcga gaagccatat gggtgccagg tgtgcgggaa
                                                                      240
                                                                      300
geggttcagc aaaggggagc ggctggtccg acaccagaga atccatacag gggagaagcc
ctaccactgt cetgeetgeg ggegaagett caaccagagg tecateetea accggeacea
                                                                      360
gaagacccag caccgccagg agccgctggt gcagtgagca tagcaggtgg caggcagcac
                                                                      420
catcattcat ctttctcact gcagggcctt gcggggtgca aggtgatggc tgcaggaaag
                                                                      480
cactggteec ategeettee cacceatteg ccaacgeggg aaaggeaagg cetggettae
                                                                      540
ttagagette cagagageat agetgeetee atetettace caagtggtge taaacaattt
                                                                      600
ttcttccaat gtttgaggga agcagtctcc tgcggttcag ttcaggctga gattttctcc
                                                                      660
ttcagtggac tgtctgtgtc cccctgccga acaaagctgg gagtaaaggc aaaaccttga
                                                                      720
cacgtgttgg tagctgggac ctcatcttcc tgagggctct gtcttgcctg cagggtcata
                                                                      780
geteagacte tteccecace ecetetett tecatigaac aaacatttat tgaacateet
                                                                      840
ctgagcacct ggccgtggga atgccgtggt gaatgagaga ctagacgtga tgcctctggg
                                                                      900
ggttgtgcgt tggggatgca tgcgacagcc catgacccga ggcattctca gggtatctgt
                                                                      960
getgtgtgee egtgagaaca tetteceatg accaeteetg eecteetgee eegtgetgga
                                                                     1020
tetteeetee eeagetggga tetgeteeca ggeaactgtg tgaattttae attatttgga
                                                                     1080
geeteatety tyteaggeta taacatteta teeteatety taaaaettee eegteeatta
                                                                     1140
tteettgeac tataacaact gteaacacac caactattag gaagttagta ttttgetatt
                                                                     1200
gatcactgaa taaacatcag agtattttaa aaaacagttc tctagaaaga actgttataa
                                                                     1260
ttaaaatgag totgaaagat gaactotagt attaatgood tatatttgat ggcactttat
                                                                     1320
agticataaa attaatitca ccccattcic attggaccca titcccaagt attiattgag
                                                                     1380
gccctgtaac aaacatgtca ggaactcttc tgggtgcttg agacacatcc atgaataaaa
                                                                     1440
tagggggaga agctgttgac ctcgtaaagc ttatgtctcg tggatgtacc tgatcttcag
                                                                     1500
aaccegtgga tatteetgea aatcetetgg geetgtatte attgetttgt cageatettg
                                                                     1560
ccctgaaatg catttgtcac ctacctcttg ttactaaatg gtctctgccc tccagaccct
                                                                     1620
tgtcatccaa ggcactaggg gtcctggaca cccactgggg atgatgagct ggtagcnacc
                                                                     1680
tgttttgcat gagtgccaag tcaggaaaaa taaagatatt tgtaggcatt aaaaaaaaat
                                                                     1740
acatttettt aaaaategag aagatgeaat atttgtaaac tgttgaaget teettattgt
                                                                     1800
gccatcactt aagggtttca tttc
                                                                     1824
```

```
<210> 5073
<211> 2399
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(821)
<223> similar to gi31867 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5073
cttcaataca gtttttagat aatgcattta ggaaaaggtg gcaaactctc ctctcagttg
                                                                       60
atgacettgt ggagaaactg gteaagagge tggagtteae tgggggagete aacaacaett
                                                                      120
acatetteta taceteagae aatggetate acacaggaea gtttteettg ceaatagaea
                                                                      180
agagacaget gtatgagttt gatatcaaag tteeactgtt ggttegagga cetgggatca
                                                                      240
aaccaaatca gacaagcaag atgctggttg ccaacattga cttgggtcct actattttgg
                                                                      300
                                                                      360
acattgctgg ctacgaccta aataagacac agatggatgg gatgtcctta ttgcccattt
tgagaggtgc cagtaacttg acctggcgat cagatgtcct ggtggaatac caaggagaag
                                                                      420
geogtaacgt cactgaccca acatgccctt coctgagtcc tggcgtatct caatgcttcc
                                                                      480
cagactgtgt atgtgaagat gcttataaca atacctatgc ctgtgtgagg acaatgtcag
                                                                      540
cattgtggaa tttgcagtat tgcgagtttg atgaccagga ggtgtttgta gaagtctata
                                                                      600
atotgactgc agacccagac cagatcacta acattgctaa aaccatagac ccagagcttt
                                                                      660
taggaaagat gaactategg ttaatgatgt tacagteetg ttetgggeea acetgtegea
                                                                      720
                                                                      780
ctccaqqqqt ttttqacccc ggatacaggt ttgacccccg tctcatgttc agcaatcgcg
gcagtgtcag gactcgaaga ttttccaaac atcttctgta gcgacctcac acagcctctg
                                                                      840
                                                                      900
cagatggate cetgeacgee ététttetga tgaagtgatt gtagtaggtg tetgtageet
                                                                      960
agtottcaag accacaccot ggaagagttt ctgggctggc tttaagtcct gtttgaaaaa
gcaacccagt cagetgactt cetegtgeaa tgtgttaaac tgtgaactet geecatgtgt
                                                                     1020
caggagtggc tgtctctggt ctcttccttt agctgacaag gacactcctg aggtctttgt
                                                                     1080,
teteaetgta ttettttat eetggggeea eagttettga ttatteetet tgtggttaaa
                                                                     1140
gactgaattt gtaaacccat tcagataaat ggcagtactt taggacacac acaaacacac
                                                                     1200
agatacacct tttgatatgt aagcttgacc taaagtcaaa ggacctgtgt agcatttcag
                                                                     1260
attgagcact tcactatcaa aaatactaac atcacatggc ttgaagagta accatcagag
                                                                     1320
ctgaatcatc caagtaagaa caagtaccat tgttgattga taagtagaga tacatttttt
                                                                     1380
atgatgttca téacagtgtg gtaaggttgc aaattcaaaa catgtcaccc aagctctgtt
                                                                     1440
catgtttttg tgaattctag gctggtgctg cactgaaata gagcagtaag cttgtgataa
                                                                     1500
                                                                     1560
aggecaatte caggtagete ttgaaggtga tagecateta etttecagtg getgecaace
acagggagtg ccagttaaca ctggaaggat taaggcaagg tcccttctct tgagactccc
                                                                     1620
ctctgagatc tgaaaaatga agtggcttag gaacatcagc agtgaagaac tgccaagagt
                                                                     1680
tggtgaaggt tgtctcttcc gagggccttc tgaagacagg gctcttgaac agacaagtgg
                                                                     1740
aagggctgta ccagggataa aggaaagaag tgcctgtcca gcagggagct tgaatttaag
                                                                     1800
ttccatgtat gaagtcattg gctctatctg catttttctg tcattctctt catttgtttt
                                                                     1860
                                                                     1920
aaggtggaaa attttcttac agttgatgca aagtatcaac tactttaccc taccttctcc
cettttagat gggttettee tgagttttgg agtettgtat gattateagt atteceetgt
                                                                     1980
caaaatcaaa tctattcagg tttcttcact gttgagaaca cctaaatgtt tttatttttg
                                                                     2040
agaagtgggg acagagtete actatgteae ceaggetgga gtgcaatgge atgateteag
                                                                     2100
cteactgcaa cettegeete etgggtteaa gegattetee tgeeteegee teetgagtag
                                                                     2160
ctgggattat aggcacacac caccacgccc agctaatttt ttgtattttt agtagagaca
                                                                     2220
gagtttcacc atgttggcca ggctggtctt gaactcctga ccttgtgatc cacccacctc
                                                                     2280
ggcctcccag agtgctggga ttacaggcat gagccaccac gcttggctaa gaacacctaa
                                                                     2340
atttttatgt ttcttggctc aaaaaccagt tccatttcta atgttgtcct cacaagaag
                                                                     2399
```

```
<210> 5074

<211> 2799

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (2800)...(697)
```

```
<400> 5074
                                                                       60
aggaaaaatg tcatttattc aaaatatgaa attttattat aattgatgtt taatgcaatt
cactttacga aggtttttgt ggttttccct aaaatttctg ttttaatgaa ggctcctgat
                                                                      120
catcctggat gtcgacaagt tttcttcttc atgtgacgtc tctgatgcac aataaactga
                                                                      180
ttagtttttc taaaactgat tatattcata gggtttcatc tcactctaac ataaagttta
                                                                      240
aqctaaacta cgtccattta actaataagc caaatttgta agagcttaac agactataaa
                                                                      300
cttaactctt gctttaaagc aacaaaaaca aaaccctgat gaagacctgg aagtgaattg
                                                                      360
ttegttttte agaetetage tteettgace ttgtgeteta tggttttgaa cacacaggae
                                                                      420
ccaagtttgc tgcagaaata acctccaaat ccatcttatg aaccaggaag actgtgaggg
                                                                      480
tttttctttt tttttttaa gggccaaggg taaatgtaat atttatcatt agcaccacat
                                                                      540
cccatggtca gcccacctg aataaacggc atattgggat ttttccacaa actatgagcc
                                                                      600
taatgaaaaa ggaaatggat aagggaaaca agttcccagc ctatgtcaca tgagtttctg
                                                                      660
cactatgtgt tatgtggtaa ggtatgcatt ccctcaggac ttcccaaatc cattacatgc
                                                                      720
tagggttttc tctctggtat gcattctggt gtgatgtacc ctaagagctg ccttacggac
                                                                      780
                                                                      840
aaaagtttte ccacattcat cacattcata gggtttetee cetgtgtgaa ttetetggtg
tactotgaga gttgaatttt gggcaaaagc tttcccgcat tcattacact catagggttt
                                                                      900
                                                                      960
ctcccctgtg tgaattetet ggtgtgcact aaggtgtgat ttctgggaga acgttttccc
acaatcatta cattcatagg atttctcccc tgtgtgaatt ctttgatgta ctctgagggt
                                                                     1020
tgaattatgg gcaaatggct tcccacatac attacattca tagggtttct cccccgtatg
                                                                     1080
aactototga tgtgcactaa catatgactt otcagagaag gttttoccac attcactgca
                                                                     1140
ttcatagggt ttctcccctg agcgagttct aagatgtgct ctgagatgtg atgtcttgga
                                                                     1200
gaaagtette ceacagteat tacatteata gggtttetee cetgtgtgaa ttetgtgatg
                                                                     1260
tgccctgagg gctgaattat cagcaaacgt tttcccacat tcattacact catagggttt
                                                                     1320
ttccccagta tgaattctct gatgtgcaca gaggtgtgtt ctttgggaga aagttttccc
                                                                     1380
acattggtta cattcatagg gtttctcccc tgtgtgaatt ctttgatgca ctatgagggc
                                                                     1440
tgccttatag acaaaagttt tcccacatac gttacattca tacggttttt cccctgtgtg
                                                                     1500
aattetetea tgteeactga ggtatgattt etgggagaaa gtttteecae aettgetaea
                                                                     1560
ttcatagggt ttctcccctg tgtgaattct ccgatgtgta ctgaggcgtg tcttctggaa
                                                                     1620
aaaagttttt ccacattcac tacattcata gagtttctcc cctgtgtgga tattctgatg
                                                                     1680
tgctctaagg gctgaattat gggcaaatgt tttctcacat tcattacatt catagggttt
                                                                     1740
ctccccgtg tgaattctct gatgtatttt gagggctgaa ttatgggcaa aagttttctc
                                                                     1800
acagteacta catteatagg gttttetace tgtgtgaatt etetgatgtg eteteaggge
                                                                     1860
tgaattgtag gtgaaagatc tcccacattc attacattca tagggtttct cccctgtgtg
                                                                     1920
aattetttga tgtgeettga gaacagaaat atgggeaaaa gaeetteeac atteattaca
                                                                     1980
ttcataaggt ttctcccccg tgtgaattct atgatgtgct ctgagggctg aattatgggc
                                                                     2040
aaaagttttc tcacagtcac tgcattcata gggcttctca cctgtgtgaa ttctttgatg
                                                                     2100
tgctctcagg gctgagttat aggtaaaaga tttcccacag tcattacatt catagggttt
                                                                     2160
ctcccctgtg tgaactctct gatgtacact gaggtgtgtc ttgtgagaga aagttttctc
                                                                     2220
acattcaaca cattcatagg gtttttcacc tgtgtgaatt ctctgatgtg ctctgagatg
                                                                     2280
tgatgtcttg gagaaagttt tcccacattc aatacattca tagggtttct cccccatgag
                                                                     2340
aattetetga tgteetttga gatgtgatgt etteecatat teaetgeeae caeagagtte
                                                                     2400
catctctgca tetgttttct ggtgtcctat gaggggtgac ttgtaagatc tcccacagcc
                                                                     2460
attgttatca caaggtttct cttttgtgtg aattctcaga tgtttactga ggtttgaatt
                                                                     2520
ctgacagaaa gctttcccac attcattaca ttcataaagt ttgaatccca cataagttcc
                                                                     2580
aggatgctga ataggatgtg aacttgaaca aaaggatttt gcacattcct catattggta
                                                                     2640
agttttetet eetgagtggg geetetgatg etgaatgagg tgtgetttee ggtaaaagga
                                                                     2700
ttttctgcat ttcccatgtt catcagaaag gtagaattta tcttctgtgt gaattctctg
                                                                     2760
atgtgctgta aagtctaatt tctggtagag ggcatctgc
                                                                     2799
```

```
<210> 5075
<211> 2261
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(1387)
<223> similar to gi746490 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5075
                                                                       60
ccaacttcaa gtgggagttc acattgctga cgtgagttac tttgttccgg agggatctga
tetggataaa gtggetgeeg agagggetae aagegtetae ttggtteaaa aggtggteee
                                                                      120
catgettece aggetgetgt gegaggaget gtgcageete aaceccatgt cegacaaget
                                                                      180
gaccttetet gtgatetgga caetgaetee agagggeaag ateettgatg aatggtttgg
                                                                      240
ceggaccate atecgetect geaceaaact tagetaegag catgeacaga geatgattga
                                                                      300
aageccaact gagaaaatee etgegaaaga getgeeeeee attteeeeag ageatageag
                                                                      360
cgaggaggta caccaggccg tcttgaatct ccacggaatt gccaagcagt tacgccagca
                                                                      420
gegetttgtg gaeggegeae ttegtttgga teagetaaag ettgetttea etetggaeea
                                                                      480
                                                                      540
cgagaccgga ttgcctcaag gatgtcatat ctatgagtac cgcgagagca acaagctcgt
ggaggagttc atgctcttgg ccaacatggc agtggcccac aagatccacc gcgccttccc
                                                                      600
cgagcaggcc ctgctgcgcc ggcacccccc gccccaaaca aggatgctca gtgacctggt
                                                                      660
ggaattetge gaccagatgg ggetgeeegt ggaetteage teegeaggag eeeteaataa
                                                                      720
                                                                      780
aagcetgace caaacatttg gagatgacaa gtactcactg geeegeaagg aggtgeteac
caacatgtgc teceggeeca tgeagatgge actgtactte tgetegggge tgetgeagga
                                                                      840
cccagegeag tteeggeact aegegeteaa tgtgeeeetg tacacacact teacetegee
                                                                      900
catcegeege tttgeegaeg teetggtgea eegeeteetg getgeegegt taggetatag
                                                                      960
ggagcgacta gacatggcgc ccgataccct gcagaaacag gcggaccact gtaacgaccg
                                                                     1020
cegeatggeg tecaagegeg tgeaggaget cagtaceagt etettettg etgttetggt
                                                                     1080
caaggagagt ggccccctgg agtcagaagc catggtgatg ggcatcctga agcaagcctt
                                                                     1140
cgacgtgctg gtgctgcgct acggcgtgca gaagcgcatc tactgcaacg cactggccct
                                                                     1200
geggteecae caetteeaga aggtgggeaa gaageeggaa eteaegetgg tetgggagee
                                                                     1260
tgaggacatg gagcaggagc cagcacagca ggtcatcacc atcttcagcc tggtggaggt
                                                                     1320
ggtcctgcag gcagagtcca cagccctcaa gtacagcgcc atcctgaagc ggccaggcac
                                                                     1380
ccagggccac ctgggccctg agaaggagga ggaggagtct gacggtgagc ccgaggactc
                                                                     1440
aagcaccage tgagetecae cageegeetg eccegeetge eccegeetgee tgteeegeea
                                                                     1500
cactggcttt aggacctgtt gacacggagg ggggttttta atttggtttt taacaactca
                                                                     1560
ggggtttgtt tttattttta tttaattttt gcagctcaac ttttaaacaa actgcagggg
                                                                     1620
agagggtggg gctggaagga aggctgaggc ctggtcagca gtgaccccag cagagcaggc
                                                                     1680
eccagteete etgggagget ggeeceett tttttetggg ecctaetgee etectetgee
                                                                     1740
caggaaatgg gggggtttca gcaactcagt gtcacagaat aaaatcaagt gtggagtgcc
                                                                     1800
atctggtgtg tagggcgcct ctgggaagcc tgggcagcag aatgcccctt gcacccaggg
                                                                     1860
caagggacce agttcagget teaceceteg etgetgagee gatgtcaaca cetggaactt
                                                                     1920
tectgteagt tecaacaega tteagagetg getgeetgge agatgattga tactggagte
                                                                     1980
teattetgee tgattaaaaa tggaattagt atgeaacaet gagagegeee ceateaceet
                                                                     2040
gacgaatgtg actgtgtctg acgaatgtga ctgtgtccaa ccctgccccc acttcctctc
                                                                     2100
tgcaccaget cegeagggee tggtgggagt catgggteet gtgatacece etceceteag
                                                                     2160
tteeteaage ageaetetgt gaggteetgt geecagetet ggtgtgagtg ggtgeeegg
                                                                     2220
cagcaccaag ggagcctgga cagaggagcc ggcctgggct g
                                                                     2261
```

```
<210> 5076
<211> 526
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(399)
<223> similar to gi5640015 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5076 atacaaatgt gaggtgtgta caaagggttt cagtgagagt tcacqccttc aagcacacca 60 aagggttcat gtggaaggga gaccctataa atgtgaacag tgtggtaagg gtttcagtgg 120 gtattcaagt cttcaagccc atcacagagt ccacacagga gagaaaccat acaaatgtga 180 ggtatgtgga aagggettea gteagagate aaatetteag geteaceaga gagtecaeae 240 aggagagaaa ccatacaaat gtgatgcatg tggtaagggt ttccgttgga gctcaggtct 300 teteatteat caaagagtee atagtagtga taaattetat aaaagegaag actatggtaa 360 ggactaccct tcatcagaga atctacacag aaatgaagat tctgttttgt tttgaagtcc 420 tcaaatggga gctgaaattt tccagtcact agagttcttt cagtagaaaa agaattttta 480 aaaattaaaa tgtaatgttg ctgcccaact tcaacattca taatgg 526

```
<210> 5077
<211> 1115
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1014)
<223> similar to gi5353887 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5077
atggatgaaa caggaaatct gacagtatct tctgccacat gccatgacac tattgatgac
                                                                       60
ttccgcaatc aagtgtattc caccttgtac tctatgatct ctqttqtaqq cttctttqqc
                                                                      120
aatggetttg tgetetatgt ceteataaaa acetateaca agaagteage etteeaagta
                                                                      180
tacatgatta atttagcagt agcagatcta ctttgtgtgt gcacactgcc tctccgtgtg
                                                                      240
gtctattatg ttcacaaagg catttggctc tttggtgact tcttgtgccg cctcagcacc
                                                                      300
tatgetttgt atgteaacet etattgtage atettettta tgacageeat gagettttte
                                                                      360
eggtgeattg caattgtttt tecagtecag aacattaatt tggttacaca gaaaaaagee
                                                                      420
aggtttgtgt gtgtaggtat ttggattttt gtgattttga ccagttctcc atttctaatg
                                                                      480
gccaaaccac aaaaagatga gaaaaataat accaagtgct ttgagccccc acaagacaat
                                                                      540
caaactaaaa atcatgtttt ggtcttgcat tatgtgtcat tgtttgttgg ctttatcatc
                                                                      600
```

```
ccttttgtta ttataattgg ctgttacaca atgatcattt tgaccttact aaaaaaatca
                                                                      660
                                                                      720
atgaaaaaaa atctgtcaag tcataaaaag gctataggaa tgatcatggt cgtgaccgct
                                                                      780
gcctttttag tcagtttcat gccatatcat attcaacgta ccattcacct tcatttttta
                                                                      840
cacaatgaaa ctaaaccctg tgattctgtc cttagaatgc agaagtccgt ggtcataacc
ttgtctctgg ctgcatccaa ttgttgcttt gaccctctcc tatatttctt ttctgggggt
                                                                      900
aactttagga aaaggetgte tacatttaga aageattett tgteeagegt gaettatgta
                                                                      960
                                                                     1020
cccagaaaga aggcctcttt gccagaaaaa ggagaagaaa tatgtaaagt atagtttaaa
cccatttcca gtccaaacca atgaaaatag tttcccaaat aagtattttg tcaaatcatt
                                                                     1080
tacaaaaaaa ataaaaattt tacttaaaaa aaaaa
                                                                     1115
```

```
<210> 5078
<211> 1669
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1665)...(1274)

<223> similar to gi4973108 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5078 ttttttttt ttagcttaca aacaacagaa ttttatttct catagttctg gaggcctgga 60 agttcaagat caaggcaacg acagagtcgg tgtttggccg acagctggtt tttttggttct 120 catacatgtc atcttcttgc cacgtcctca tatggtggaa gggtcgagtt agctctctgg 180 ggccttttta aataagggca ctaatcctaa tcatgagggc tctgcactcc tgatctaatc 240 acttcccaaa ggcccacttc ttaaatgcca tcaccttggg gattaggatt tcaacataat 300 ggcttttgag gggatacaaa ctagaactaa agaacagacc ataggcacca gctaaagact 360 ggtatgtcag taagaatagc tgaatgaggc tggaaagaga taataattag aagggacaaa 420 gtcccattcc agagcccaac acctagggtt tcattaggct ggggtttctc aaactcagta 480 caactgacat tttgggccag attatttttc gttgtggggt actgccctgt gcattatagg 540 atgtttagcg gcacccctgg cttctattta ctggatgcca gtagcacaca catcccacca 600 teccecaace ecceaagtat aatgaceaaa atgtetecaa acattgeeca atgteetetg 660 gggggcaaaa ttgcccccag ttgagactgc tgtattcaat ccacttccat tagttctctt 720 taaatcacaa cattetggte gatataacag atagaaatte etgatetaga cageagaatt 780 ctgttgtgtt aagagagaat acacaattat agctaaactc ttattctcac tttatataaa 840 tttatttaca ctcacctaac tacattattc taacaaaaca ctgggacaac ttgtaaaagt 900 acttatgcat atgtgcágga caggaagaga aaataaagga accagattta ttggggtggt 960 ttaagtgaga tcatgggatg aactcgttta cttctattca gcagtagcct ttgtggtccc 1020 aggetteegg tggecagata átteeeteaa etecatgage aggtgaeega ggaggaetet 1080 cacateetge atgtgtttga gaagaaggee catetggtga tacagatgag gatetggeat 1140 ccccagagga gaagaaaagc ctggatcctc agaagatggg gttggcggcg gaggcagagg 1200 cccaggggcc tcctcaggag cagttcctgg agcagctgat ttctgaggag ctggattcaa 1260 tgtgggaggt gcagcagagc tggaagcacc ctgcactctg atctctagct gggggctctg 1320 tttccaaact tggttgtcct cagtggctgc ctcacaccag tatgacccgg agtgatcttc 1380 tgaagetgtg gggatetgga attetgagga gageceettg etttgeacta teetteeate 1440 cttgtagaag gagaagagga ggcgggcagc tgacctctgc aggggcaact ttgtctgaca 1500 actcagggtc atggggcttc ctgcttgggg ttcagctgag ggtacagctc tgagaattgg 1560 cgctggaaac agttcttgga ctgtgatagc cacaacagat gctgtttctg ggatcccagg 1620 accagggete tggaagatge cactgeagtg gtagtgeeeg etgtetgee 1669

```
<210> 5079
<211> 913
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)...(236)
<223> similar to gill76422 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5079 ttcactgcag aagaagggga cttgtggttt accttgagag ggaacgcccc cgttcaggtt 60 cacttootgg atcettactg ctctgcctcg gtggcaggag cccggggaagg agattatatt 120 gtetecatte agettgtgga ttgtaagtgg etgaegetga gtgaggttat gaagetgetg 180 aagagetttg gegaggaega gategagatg aaagtegtga geeteetgga etecacatea 240 tecatgeata ataagagtge cacatactee gtgggaatge agaaaaegta etecatgate 300 tgcttagcca ttgatgatga cgacaaaact gataaaacca agaaaatctc caagaagctt 360 teetteetga gttggggcae caacaagaae agacagaagt cagecageae ettgtgeete 420 ccatcggtcg gggctgcacg gcctcaggtc aagaagaagc tgccctcccc tttcagcctt 480 ctcaactcag acagttcttg gtactaatgt gaggaaacaa acatgttcag gccccgaaca 540 tttccggtgc tgactcggcc ttaaacgttt gtgccataat ggaaaatatc tatctatctg 600 ttctcaaatc ctgtttttct catagtgtaa actcacattt gatgtgtttt tatgaaggaa 660 agtaaccaag aaacctctag gaattagtga aaaaagaact tttttgaggt gtgttactat 720 actgctgtaa gttatttatt atataaagta ttgtaaatag aatagcgttg aagatatgaa' 780 atatggctat ttttaatggt gacaattatg acttttagtc actattaaat tggggttacc 840 tatatcagta caatttgtag ttgtttccag gtttggctaa taatcattcc ttaacctaga 900 attcagatga tcg 913

```
<210> 5080
<211> 686
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (193)...(372)
<223> similar to gi2865208 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5080
ctgggccgca gggcagtgca ctcctcagcc ggcttcctct ggtcacgccg gcggggccgc 60

```
120
agcactgtgt gaggggtggg gccctggcac ctagcttggg cacgtgccct cctagccgga
cctcccacag gcaggggctc tgctcccacc tgcctctgcc agcccactag tgctcaccgt
                                                                      180
tecetaggtg tgtttgteaa agtgtetetg atgaaceaea acaagtttgt caagtgeaag
                                                                      240
                                                                      300
aagacttcag ctgtgctggg ctccatcaac cctgtgtaca atgagacctt cagcttcaag
                                                                      360
geegatgeea eegagetgga taeegetage etcageetga etgtggtgea gaacatggaa
                                                                      420
qqqqacaqta aggccacacc ctaccctggg ctgctgggat ggggaccacg aggggctgcc
                                                                      480
qaqtqttcaq gcagagtgag tgcctcctgt cctgacctca aaaggagctg tacgagctcc
                                                                      540
ctccctggtt aaggaaacta gtgctcagaa aggctgaaat attgcccaag gcctgggttt
caggedcage tttagtedag ttgagetetg tetgtggdac cetagaaaca ggttaagcag
                                                                      600
                                                                      660
ccqqqcatgc tggctcacat ctgtaatccc agcaccttgg gaggccaagg tgggtggatc
                                                                      686
acttgagctc aagagttcaa gaccag
```

```
<210> 5081
<211> 1642
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(524)
<223> similar to gi4038081 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5081
                                                                       60
atgagacget ttttaageaa agtetacagt tteecaatga gaaaattaat eetetteet
gtotttocag tigtgagaca aactoccaca cagcactita aaaatcagti cocagcictg
                                                                      120
cactgggaac atgaactagg cctggccttc accaagaacc gaatgaacta taccaacaa
                                                                      180
tteetgetga teecagagte gggagaetae tteatttaet eecaggteae atteegtggg
                                                                      240
atgacetetg agtgeagtga aateagacaa geaggeegae caaacaagee agacteeate
                                                                      300 ,
actgtggtca tcaccaaggt aacagacagc taccctgagc caacccagct cctcatgggg
                                                                      360
accaagtetg tgtgegaagt aggtageaac tggtteeage ecatetacet eggageeatg
                                                                      420
                                                                      480
ttctccttgc aagaagggga caagctaatg gtgaacgtca gtgacatctc tttggtggat
tacacaaaag aagataaaac cttctttgga gccttcttac tataggagga gagcaaatat
                                                                      540
                                                                      600
cattatatga aagtcctctg ccaccgagtt cctaattttc tttgttcaaa tgtaattata
                                                                      660
accaggggtt ttcttggggc cgggagtagg gggcattcca cagggacaac ggtttagcta
tgaaatttgg ggccaaaatt tcacacttca tgtgccttac tgatgagagt actaactgga
                                                                      720
aaaaggctga agagagcaaa tatattatta agatgggttg gaggattggc gagtttctaa
                                                                      780
                                                                      840
atattaagac actgatcact aaatgaatgg atgatctact cgggtcagga ttgaaagaga
                                                                      900
aatatttcaa cacctcctgc tatacaatgg tcaccagtgg tccagttatt gttcaatttg
                                                                      960
atcataaatt tgcttcaatt caggagcttt gaaggaagtc caaggaaagc tctagaaaac
                                                                     1020
agtataaact ttcagaggca aaatcettca ccaattitte cacatactit catgeettge
                                                                     1080
ctaaaaaaaa tgaaaagaga gttggtatgt ctcatgaatg ttcacacaga aggagttggt
                                                                     1140
tttcatgtca tctacagcat atgagaaaag ctacctttct tttgattatg tacacagata
tctaaataag gaagtatgag tttcacatgt atatcaaaaa tacaacagtt gcttgtattc
                                                                     1200
                                                                     1260
agtagagttt tettgeeeae etattttgtg etgggtteta eettaaceea gaagacaeta
                                                                     1320
tgaaaaacaa gacagactcc actcaaaatt tatatgaaca ccactagata cttcctgatc
                                                                     1380
aaacatcagt caacatactc taaagaataa ctccaagtct tggccaggcg cagtggctca
cacctgtaat cccaacactt tgggaggcca aggtgggtgg atcatctaag gccgggagtt
                                                                     1440
caagaccage etgaccaacg tggagaaace ceatetetae taaaaataca aaattageeg
                                                                     1500
ggcgtggtag cgcatggctg taatcctggc tactcaggag gccgaggcag aagaattgct
                                                                     1560
```

```
<210> 5082
<211> 1137
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(269)
<223> similar to gi2598168 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5082 tggagagaaa ccatttaaat gtgaggaatg tgggaaagaa ttcagttgga gtgctggtct 60 cagtgcccat cagagggtcc acacaggaga gaaaccctat acgtgtcagc agtgtgggaa 120 gggetteagt caggeeteae attiteacae acaecagaga gtecacaetg gagagaggee 180 ttacatatgt gatgtctgtt gtaagggctt cagtcagagg tcacatctca tctaccatca 240 gagagtecae aetggaggga atetgtagaa atgagaggtg tggtteagee tteagttaga 300 gctcacatct ttgtctccgt tgggaagtcc atgctgatga ttgtgaaaag ttcctttaaa 360 actagaaget teaaagaate ttgacaggaa agaagtetet caaatgetgt gttttagaet 420 tggttaggac atgaattett tacaaacgte atattteaca gatgegagaa aactttgtte 480 tgtaaatatg atcagtgttt atatcagagt accaggtgtc ccggttctca agatgtaaca 540 cagcagaaaa gtcttgtcgg agtctgcaca ggagagaggc cttcctttaa caaaagtatg 600 attgacagaa aaaatggatg tcaactaaaa tgtaacctct atgtaaggag gtgtttttca 660 ccactctatc totaccatgt agaattgtgc ttggctcata atagggccca gcaattactg 720 aagaaagtga agaaaatacc tataattagg acaaatactt gaaaattcta gtctgttttc 780 tactctaaat ttatattaat ttatattcaa aaggaatcct gcaagtagcc ttaatgacgt 840 tagtttcagt aagtactgaa aagtatataa tactgccatc catactaaca caaatttgga 900 aaaaagacat gaatggctcc catcettcag cettagttet ttgtacagtg tatcatcagt 960 tgtgtacagt atgattttta gtgtcagttt atagactgaa caatactgtt tttatctaat 1020 gtgaccetge aatttacatg attagaattt ttggeeeeta agetgtaetg taactetgaa 1080 agtgttaaaa gtagttactg atgacaaaaa gtttcttagt aaacttgaat tgttaaa 1137

```
<210> 5083

<211> 1839

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1840)

<223> n = a,t,c or g
```

<220>

```
<221> misc_feature
<222> (295)...(640)
<223> similar to gi4455730 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5083
gagattgcaa acctcatctt ggctgagaac tgcgaggctg ccctggctct tcatctctat
                                                                       60
aggggaggca ggcttttgca aggccaccga atcccttttg gaqtcatctt tggtggaact
                                                                      120
gatgtaaatg aagatgccaa ccaggcggaa aaaaacacag tcatqqqcaq agttcttgag
                                                                      180
gaagccagat ttgctgtcgc tttcacagag tcaatgaagg aaatggcaca agcgcagtgg
                                                                      240
gtcgatccag tgtttacaag ggaagtgaaa gccaaagtga aaagagccgc tggggtacga
                                                                      300
ttgattggag agatgcctca agaagatctg cacgcggtgg tgaagaattg cttcgcggtg
                                                                      360
gtgaataget etgtetetga aggeatgtea getgeaattt tggaggeaat ggatttagaa
                                                                      420
gtaccggtat tggccaggaa catccccggg aatgctgccg tggtgaagca tgaagtcaca
                                                                      480
gggctactgt tttccaatcc tcaggagttt gttcatctgg caaagagact ggttagtgat
                                                                      540
cctgcattag aaaaggaaat cgtagtgaac ggaagggaat acgtgagaat gtatcattca
                                                                      600
tggcaggtgg aaagagacac ctaccaacag ctcatcagga agctggaagg aagcactgaa
                                                                      660
gattgaggge ecegeeteat eagacacetg etetetgaca eacagetetg ggtgeacaet
                                                                      720
cagagacaga gttctggatc acgtgggdcc agtgdagttc aaataaaacc aqcctcaqcq
                                                                      780
gaatcctaga aaatgttagt cgtgagtccc cagagccact gcattcatcc catatccttc
                                                                      840
tgtgcgttca gatgctgtcc caggcgtgtt caccagccag tcctgatgga ggtgcatgag
                                                                      900
tgactgggtt gactgggaca gggaaagggg aactggtttt cagggaattt gggagagaat
                                                                      960
ttgattacct gccttagggc tttggtgtgg acaatagagg cttattttca agcagtcatg
                                                                     1020
gttcagactc ctcccgcctg cettctgacc aacetctccc categttgcc agtttgaaaq
                                                                     1080
gcaaaagcaa aacagacgtg teagetgage egagteeteg eaggattttt qttqtqatet
                                                                     1140
caggactetg acaggcacgt gggtgacccg aggettetet gaacactaga aagegetgtg
                                                                     1200
agtgagetea egeceggeae ageteaettt teaatggtgg aattgaaagt tgtgettttt
                                                                     1260
agaaaagtgg ccaggctgcc cgcaggcccc gcccacctct tggctgaatt tgagtggaaa
                                                                     1320
accaggaagg aacaagegee aegteaegea tageetgeaa ategeeegeg tgaeeetgag
                                                                     1380
atggaggeet gaggetttgg gtecagggtg ggetetteee etteceaeat cagggaeeeg
                                                                     1440
gggatggatg tcggaagggt caccagcctc cagcetttgg caggatggag ettgggtctg
                                                                     1500
cagggetttg cagecacaca gegaggteag teeggggeea geegegeeat catqqtaatq
                                                                     1560
gtggcetcgc cccatccatg tcatccatgt cacatgagga cgtgcagtct ttccttgttc
                                                                     1620
cttttcctta gtgggaattt tgcctgggga gaacctccac ttgaataatt gaaatttttt
                                                                     1680
tgeattgeet gttgggattt cetttaegga caatgggggg aaegeggtgt tteecaeete
                                                                     1740
ttgtgggtag aaagcagtot gotttgagga ggcgagaagg caaagcangg ggcaggggct
                                                                     1800
ttgctgtggg aagcgttcgg tgaaagcggg tttcgacgc
                                                                     1839
```

```
<210> 5084
<211> 459
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (85)...(406)
<223> similar to gi3327076 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5084
gggttcaaga cccacttctt ggtctgtggg cctggggagg ggtgctggtc aaggagcatg
                                                                       60
ggtggtgaca gaggtgtctg ggggcagtgt gagatgaatc agatgagcgg agaacctctg
                                                                      120
gacaagctga acttegagge cateaactte tgteggggte tgggcagcca ggcatecace
                                                                      180
gtgactgaga ttgtgaagca gcaagacccc ctggtctaca aggccatcca gcaaggcatc
                                                                      240
aatgctgtga accaggaagc catgaacaat gcacagagga ttgaaaagtg ggtcatcttg
                                                                      300
gagaaggact tttccatcta tggtggagag ctaggtccaa tgatqaaact taagagacat
                                                                      360
tttgtagccc agaaatacaa aaaacaaatt gatcacatgt accactgact gctttgatgg
                                                                      420
agctgctctc agctgttctg atgccttcag caggaagac
                                                                      459
```

```
<210> 5085
<211> 774
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (633)...(516)
<223> similar to gi5689451 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5085
cactataatg attggtatta aagctgtttt tttttctttt tttaaaaaata catgtcaaaa
                                                                       60
ttttcttgga ctcccctggc aagcaggtat acttcaagag cacgggagct tttctttcaa
                                                                      120
gagtecacat ttecaggaag getggtgaga geaaacgagg gaettteagt aacetggeaa
                                                                      180
ggcagaataa agtgaccaag ctggaacgaa tccccctgtg ccctggcttc atcgggacta
                                                                      240
cetgeagget gateaggggt ggeeageeae aaacaceteg agggeettee attteaette
                                                                      300
acactggcag gcacttactc agecetgtta aacacaeggt tagtgecata tgettgaget
                                                                      360
gagatcacta ggaggggcag cgctgggtaa ctctttggga cttcacattt ccagagggag
                                                                      420
geatettgtt ttteecetea getgtggaaa ttetttttgg aaagettaag ageaaggetg
                                                                      480
ccctttgcac acaaggacat gctgaccgtt atacctgctg tagatgcctg tctccqttct
                                                                      540
cattggcagg actactctcc gacccattac tgcttcctga ttgctctttt tcattcaaca
                                                                      600
aagetgtgge atacgetaac gtgteetgea gaagatteaa acacaagaeg acaaagttag
                                                                      660
ggcccattca gtggcagcag caaccgccag ggaagactac ctttcatctg accttcagtg
                                                                      720
ggaccggagg cctgagagtg aggcetteat cacagteace agaaccccet caac
                                                                      774
```

```
<210> 5086
<211> 1806
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (211)...(826)
```

<223> similar to gi5817018 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5086
aagacatcag aatttgtatg tgatccatac aatattattt tttagtatgc ttttagcaaa
                                                                       60
caaactcact ggtctttctt tactattaat aatgtgctaa ttttgtattt gagtttctga
                                                                      120
tcaaactttt tattcctttg tcatcttttc ctactttaat ggatcgagaa gtggcgttgc
                                                                      180
ttgctgaaat ggacaaagtg aaagctgaag caacactttg ttaqtqaacq taaatatqat
                                                                      240
gaggatetgg gacgagtage ceggtteace tgtgatgtag agaccetaaa gaaqaqeatt
                                                                      300
gattcatttg gacaagtgtc tcatccaaag aacagctatt cgaccagatc ccgatgtagc
                                                                      360
tcagttacat ctgtgtcctt gagtagccca agtgatgcct ctgctgcttc ctcttccacc
                                                                      420
tgtgcctctc ctcccagcct tacaagtgct aacaagaaaa actttqcacc qqqaqaqact
                                                                      480
cetgeageea tageaaacte cagtggeeag ceetaceage caetteggga ggtattgeea
                                                                      540
gggaacagac gaggaggaca gggctatagg ccacaaggcc aaaagtccaa tgaccccatq
                                                                      600
aaccaagggc ggcatgacag tatgggtcgt tacagaaaca gctcgtggta ttcatctqqt
                                                                      660
tecaggtate agagtgetee ateteaggea ecaggaaaca ceattgaaag aggeeagaet
                                                                      720
cactetgeag ggaccaatgg aactggagte ageatggage ceageettee cacgeettea
                                                                      780
ttcaaaaagg ggctccccca gcgcaaaccc aggacctctc agactgaagc cgtgaactct
                                                                      840
tgagagaaaa tecagttgge eteteteete tateeacaca atteaacttg ataactggae
                                                                      900
tttaggaaac ttacagttag atgtaataac aaaaagaagt ttatgegtat cactttttgt
                                                                      960
gccattctaa gtatttttgg tttcttgtct ccttatttcc tctttaccat ttttqqaqqq
                                                                     1020
gaagetattt tittteettg atetiteeea gigataigga tigaatetgg tiggteatit
                                                                     1080
ccaccaggaa tcagaggcag ctgttaccag gtttcggcct tccagttgat ccctccactg
                                                                     1140
tecaggetgt etcaggagga ggtgaateag agetagtetg teacetttee aatetaagee
                                                                     1200
gaagccacag gtgcctgaca ggttcccttc taacaactat ttgaccaaga gaggcaatca
                                                                     1260
gggggttgta tactgcactg gattcgccag agaagggaaa atttaattag tgaaaaggaa
                                                                     1320
agaacactag gaaacatttg agaacctgcc tctatcccag aatgtgctqq aqatttqaca
                                                                     1380
ctcaaatcag tgtttagtct tctgcttggc accatagctt aacctgcaqt ttcttcaaaa
                                                                     1440
tgcccaatgc cttgtttcct attaccttag attgcaaacc agtctaggga agtctatgag
                                                                     1500
aaagtagcat ttaattaaag tttaaaaaaaa aaaaggttgg gcgttgtggc tcatgcctgt
                                                                     1560
aatcccagca ctttgggagg ctgaggcggg tggatcacta ggtcaggagt tcaagaccag
                                                                     1620
cctggccaac atggtgaaac cctgtctgta ctaaaaatac aaaaattagc tgaqcatqqt
                                                                     1680
ggcgtgtgcc tgtaatctca gctactcagg aggctgaggc aggagaatcg cttgaaccca
                                                                     1740
ggaggcggag gctgcagtga gctgagattg tgccactgca ctccagcctg ggagacagag
                                                                     1800.
caagac
                                                                     1806
```

```
<210> 5087
<211> 1784
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (38)...(1483)
<223> similar to gi4768838 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5087
ccagctgcca ggcaccttgt aaatacatgg tgccgggcag ctggccatga ctcatccaag
                                                                     60
tcatcattta aattttggaa tgaatcctga tcatgccagg aattcattat ctaactgtgg
                                                                    120
aattcggcag cccaaatacg gagacagaaa agttcatcac atgcacatgc ggaagaaagg
                                                                    180
gattaacacc ttgataaata tcatgtcacg ccttggccaa gatgacccaa ctccctcgag
                                                                    240
gattaaccac aatgaacggt tggaattcct gggtgatgct gttgttgaat ttctgaccag
                                                                    300
cgtccatttg tactatttgt ttcctagtct ggaagaagga ggattagcaa cctatcggac
                                                                    360
tgccattgtt cagaatcagc accttgccat gctagcaaag aaacttgaac tggatcgatt
                                                                    420
tatgctgtat gctcacgggc ctgacctttg tagagaatcg gaccttcgac atgcaatggc
                                                                    480
caattgtttt gaagcgttaa taggagctgt ttacttggag ggaagcctgg aggaagccaa
                                                                    540
geagttattt ggaegettge tetttaatga teeggaeetg egegaagtet ggeteaatta
                                                                    600
tectetecae ceaetecaae tacaagagee aaataetgat egacaaetta ttgaaaette
                                                                    660
teeggtteta caaaaactta etgagtttga agaagcaatt ggagtaattt ttactcatgt
                                                                    720
tcgacttctg gcaagggcat tcacattgag, aactgtggga tttaaccatc tgaccctagg
                                                                    780
ccacaatcag agaatggaat tcctaggtga ctccataatg caactggtag ccacagagta
                                                                    840
cttattcatt catttcccag atcatcatga aggacactta actttgttgc gaagctcttt
                                                                    900
ggtgaataat agaactcagg ccaaggtagc ggaggagctg ggcatgcagg agtacgccat
                                                                    960
aaccaacgac aagaccaaga ggcctgtggc gcttcgcacc aagaccttgg cggacctttt
                                                                   1020
ggaatcattt attgcagcgc tgtacattga taaggatttg gaatatgttc atactttcat
                                                                   1080
gaatgtctgc ttctttccac gattgaaaga gttcattttg aatcaggatt ggaatgaccc
                                                                   1140
caaatcccag cttcagcagt gttgcttgac acttaggaca gaaggaaaag agccagacat
                                                                   1200
tectetgtae aagaetetge agaeagtggg eccateceat geeegaacet acaetgtgge
                                                                   1260
tgtttatttc aagggagaaa gaataggctg tgggaaagga ccaagtattc agcaagcgga
                                                                   1320
aatgggagca gcaatggatg cgcttgaaaa atataatttt ccccagatgg cccatcagaa
                                                                   1380
geggtteate gaacggaagt acagacaaga gttaaaagaa atgaggtggg aaagagagca
                                                                   1440
tcaagagaga gagccagatg agactgaaga catcaagaaa taaaggaggg catgcaagtg
                                                                   1500
tggagtattt acttgctcag taactgtgac tgttgtctat tgagacctag cctagttttc
                                                                   1560
1620
tgttttaatg atctgttttt agctggatgg tctttattac aaagtattag atttttcttc
                                                                   1680
tatttaacgg aaaacttgac tttggtgaat gtgcattact tccttttatt ttgctcttta
                                                                   1740
aataataaaa ttcaagaagc atattctatg tggaaaaaaa aaaa
                                                                   1784
```

```
<210> 5088
<211> 843
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(844)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (795)...(174)
<223> similar to gi3335567 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5088
ttttttttt ttttgtaggt cagagacagc tggatcagct ccagcccaca tttattacaa
```

```
aatagtgacc gcagttctgg tatagaaaag atccctgaca gcccagtaca cctgcaacgg
                                                                      120
ccccaccc acagagttcc tctctcaggt gcctcaggtg tggaagttct cagattcgaa
                                                                      180
                                                                      240
qqtttcctqc caqqagggcg ctgtaccggg cagttgtgag gggcaggtag gcacctacag
                                                                      300
cctggtccag aacgtacagt gggtcagaca gggtgctggg gtcgaagccc tcatttgcca
tecgaacttt etgetgtttg aaggtetetg tggtggeeaa agaeteetgg ageetgagga
                                                                      360
                                                                      420
atcggggccg ggcataaggt ggcaagttct cagacacgtg ggtgtagagc tgcataaggt
ccaaagcgtg ggggggacgc agaactaggg ctgccattcc agccctgcct tcatgccctg
                                                                      480
gcacagtgac tocatagacg ttcacctcct gaagaaaatc tagggcctcg aagacctctg
                                                                      540
ccaccteggt tgtggccaca ttctccccct tccacctgaa ggtgtctcca gtacgatcat
                                                                      600
                                                                      660
ggaagcggag aaaaccttgg tcatcgcaga ccagcaggtc cccagtgttg aagaaaacat
ccccaggccg gaagacatcc. tttagcaact tcccctgggc cagctctggc ccgccagcat
                                                                      720
                                                                      780
ageceaggaa tggggaetge tggettaeeg gggeeaceag cagecetgge teacetggea
                                                                      840
gagtetecag ggteaggagt ggtgtgeeta ggggetacaa ceagtgtete aaantngeee
                                                                      843
act
```

```
<210> 5089
<211> 851
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (92)...(652)
<223> similar to gi2673914 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5089
gtgactgttt ctttttttgc catcacaaaa taatatttta gtcaaatttt taaaatctta
                                                                       60
ttcagaggac tttacctcat tttttccttt tttcagaact gtgacaattg agaagtgcag
                                                                      120
gaatagcatc tttgtcttgg gccctgtagg gactacactt cacctccaca gttgtgacaa
                                                                      180
                                                                      240
tgttaaagtc attgctgttt gccatcgttt gtccatctct tctacaacag gttgcatctt
teaegttett aegectaeae geceaettat tetetetggg aaccagacag taaettttge
                                                                      300
cccttttcat acacattacc caatgctaga ggaccatatg gccaggactg gccttgctac
                                                                      360
agtgcctaac tattgggata atccaatggt tgtgtgcaga gagaacagcg acacaagagt
                                                                      420
ettecagett ttaccacett gtgaatteta tgtatttatt attecetttg aaatggaagg
                                                                      480
ggacacaaca gagatacccg ggggtcttcc atctgtatat cagaaagcac tgggtcaaag
                                                                      540
                                                                      600
agaacagaag atacagatct ggcagaaaac tgtgaaggag gctcatttga caaaggatca
aaggaagcag ttccaggtac tggtagagaa caagttttat gaatggttga ttaatacagg
                                                                      660
acatogocaa cagotggaca goottgtaco cootgoagoa ggotocaaao aagoagotgg
                                                                      720
ataaggatet tacatgeaga caetgggeee tggaaataca aggataaatg gaggatggtg
                                                                      780
ctcatcttga aacttgaaac taaattggga aggtgctatt gctgcttaag agacattggg
                                                                      840
acttttctgt c
                                                                      851
```

```
<210> 5090
<211> 662
<212> DNA
```

```
<220>
     <221> misc feature
     <222> (74)...(604)
     <223> similar to gi3287449 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5090
                                                                       60
gaagatacaa gtcacggttg atgatectgt cacaaagcca gtggtgcaga ttcatectec
ctctggggct gtggagtatg tggggaacat gaccetgaca tgccatgtgg aagggggcac
                                                                      120
teggetaget' taccaatgge taaaaaatgg gagacetgte cacaceaget ceacetacte
                                                                      180
cttttctccc caaaacaata cccttcatat tgctccagta accaaggaag acattgggaa
                                                                      240
ttacagetge etggtgagga accetgteag tgaaatggaa agtgatatea ttatgeecat
                                                                      300
catatattat ggaccttatg gacttcaagt gaattctgat aaagggctaa aagtagggga
                                                                      360
agtgtttact gttgaccttg gagaggccat cctatttgat tgttctgctg attctcatcc
                                                                      420
ccccaacacc tactcctgga ttaggaggac tgacaatact acatatatca ttaagcatgg
                                                                      480
gectegetta gaagttgeat etgagaaagt ageceagaag acaatggaet atgtgtgetg
                                                                      540
                                                                      600
tgcttacaac aacataaccg gcaggcaaga tgaaactcat ttcacagtta tcatcacttc
cgtaggtatg tgtgacatac aaggaaggga tcctaataaa acatgaatgc atgcaaaaaa
                                                                      660
                                                                      662
     <210> 5091
     <211> 1127
     <212> DNA
     <213> Homo sapiens
     <220> .
     <221> misc feature
     <222> (137) ... (505)
     <223> similar to gi4972120 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5091
ggcgtagcct aagcgtggga ttccgcgcgt gcgctcggct ccgcctggtg cggccgcggc
                                                                       60
cgggagggac tggattatgt cggccccgtt tgaggagcgg agtggggtgg taccgtgcgg
                                                                      120
gaccccgtgg ggccagtggt accagacctt ggaggaggtg ttcattgaag ttcaggtgcc
                                                                      180
gccaggcacg cgcgcccagg atatccagtg cggcctccag agccggcatg tggcgctgtc
                                                                      240
ggtgggcggc cgcgagatcc tcaagggcaa actctttgat tctacaatag ctgatgaggg
                                                                      300
aacatggact ttggaggaca gaaaaatggt tcgtattgtt cttacaaaga caaagagaga
                                                                      360
tgcagcaaat tgttggactt ctctactaga atctgaatat gcagcggatc cttgggtgca
                                                                      420
agaccaaatg cagagaaagc ttacattaga gagattccaa aaagaaaatc ctggttttga
                                                                      480
cttcagtgga gcagaaatct caggaaacta cactaaaggt ggaccagatt tctcaaacct
                                                                      540
```

<213> Homo sapiens

600

660

720

780

tgagaaataa ctgctttttt tcctgcattc tgtggatcct agcagatatt gccaacttaa

tcagataaac agattatgta atggaagaaa aatgcggatg cctacagtta acagattgca

aaatgtatct taaaatggtt ctaaaaattg cattcaaaca taatttacat aggaaatgta

ctgtgggaac tattctatgg atatatggta aagttgtttt ggacttgttt ttgctcagca

```
tgaagtttta tatgctgcat tttactaatt ccatatttaa ccatatttt aatacaaaag 840 aacattagag tatagatcat gtgaaatgaa gggtgccttt ggggaaaatt aacttttct 900 tttgataagt atgatatca ataaaatttt ctaaatagga attgtgtacc cctttgtcta 960 agtataacaa ttcacacaaa attatagtgc tgaaaacaat tttaataaag gaaaaagtta 1020 attttcccca aaggcaccct tcatttcaca tgatctatac tctaatgtc ttttgtatta 1080 aaaatatggt taaatatgga attagtaaaa tgcagcgtcg acgcggg 1127
```

```
<210> 5092
<211> 1978
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (80)...(669)
<223> similar to gi3878112 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5092 aggogtgaat tootactoat gtootgoact gaaatotagg atoggaaaga atoogttttt 60 atttgaaaat teetttteag aaaateagge atttgettet ettaagaegg ttttagagte 120 tttgccagaa gacgtacggt ttaacattga aataaaatgg atctgccagc ccagggatgg 180 aatgtgggat ggtaacttat caacatattt tgacatgaat ctgtttttgg atataatttt 240 aaaaactgtt ttagaaaatt ctgggaagag gagaatagtg ttttcttcat ttgatgcaga 300 tatttgcaca atggttcggc aaaagcagaa caaatatccg atactatttt taactcaagg 360 aaaatctgag atttatcctg aactcatgga cctcagatct cggacaaccc ccattgcaat 420 gagetttgea cagtttgaaa atetaetggg gataaatgta cataetgaag aettqeteaq 480 aaacccatcc tatattcaag aggcaaaagc taagggacta gtcatattct gctggggtga 540 tgataccaat gatcctgaaa acagaaggaa attgaaggaa cttggagtta atggtctaat 600 ttatgatagg atatatgatt ggatgcctga acaaccaaat atattccaag tggagcaatt 660 ggaacgcctg aagcaggaat tgccagagct taagagctgt ttgtgtccca ctgttagccg 720 ctttgttccc tcatctttgt gtggggagtc tgatatccat gtggatgcca acggcattga 780 taacgtggag aatgcttagt ttttattgca cagaggtcat tttgggggcg tgcaccgctg 840 ttctgggtat tcattttca tcactgagca ttgttgatct atgccttttg ggcttctcag 900 ttcaatgaag caataatgaa gtatttaact ctttcactac agttcttgca agtatgctat 960 ttaaattact tggccaggta taattgccag tcagtctctt tatagtgaga aaatttattg 1020 gttagtaata taaatatttt aaactaaata tataaatcta taatgttaaa catatgttca 1080 ttaaaagcat agcactttga aattaactat ataaatagct catatttaca cttacagctt 1140 ttcatttgat caggtctgaa atctttagca cttaaggaaa atgactatgc ataattatac 1200 ctgaccatga aaaaaataag tacctcaaat gcatgcattt gcactggtga ttccaactgc 1260 acaaatettt gtgccatett gtatataggt atttttaca tgggttgaca tgcacacaac 1320 accattttca ttcagtatga accttgaggc tgctgccatt tttccactta accaaaccag 1380 cctgaaggtg aacctcgaaa cttgtttcat aaatctttca aaagttgttt tacatcaatg 1440 ttaaaatttc aaaatgctgc agggtaattt aatgtataaa atattagtaa gaaaaagtat 1500 gtattgcata cttagtagaa tagatcacaa catacaaatt caattcagtg catgctttag 1560 gtgttaagca tgagattgta catgtttact gttaggtcct tgcatctgtg gtgctaggtg 1620 agtatgagaa gatgtcaagg actggacgta ttttgttgcc taaaaaaaaa aaggctgttt 1680 gtaggcgttt taaatatgct tattttgtgt gtctctcact acctattaca cactgttgct 1740 ttgtgggttt gttttgtatg tgcgtgtgtt atacagtagt taaatttcca tgcagaaaaa 1800 taaatgteet gaatteteat attagtatte tttattgtat atcatgeatg taatttattt 1860

```
<210> 5093
<211> 1594
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1048)
<223> similar to gi5101768 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

(100)	5075					•
atgaccacag	gcaccgagat	cacagtcatg	ggcgaggtga	gaggcatcgg	tccctggatc	60
ggcgggagcg	aggccgcagt	cccgacagga	gaagacaaga	cagccggtac	agatctgatt	120
atgaccgagg	gagaacacca	tctcgccacc	gcagctacga	acggagcaga	gagcgagaac	180
gggagagaca	caggcatcga	gacaaccgaa	gatcaccatc	tctggaaagg	tcctacaaaa	240
aagagtataa	gagatctgga	agtcgctccc	caagtaggga-	gaagaagaga	gctcgttggg	300
			agagttctgg			360
caatcaagga	aaaagagccc	gaggagacca	tgcctgacaa	gaatgaggag	gaagaagaag	420
aacttcttaa	gcctgtgtgg	gttcgatgca	ctcattcaga	aaactactac	tccagtgacc	480
ccatggatca	ggtgggagat	tctacagtgg	ttggaacgag	taggcttcgt	gacttatatg	540
acaaatttga	ggaggagttg	gggagcaggc	aagaaaaggc	caaagctgct	cggcctccgt	600
gggaacctcc	aaagacgaag	ćtcgatgaag	atttagagag	ttccagtgaa	tccgagtgtg	660
agtctgatga	ggacagcacc	tgttctagca	gctcagactc	tgaagttttt	gacgttattg	720
			accgacttca			780
atccaggcca	gatgaatgat	ggaccactct	gcaaatgcag	cgcaaaggca	agacgcacag	840
gaattaggca	cagcatttat	cctggagaag	aggccatcaa	gccctgtcgt	cctatgacca	900
			tcacagtctc			960
ctgacaggcc	aactgttata	gaatacgatg	atcacgagta	tatctttgaa	ggattttcta	1020
			cactgtgtaa			1080
actacacgat	tcatttcatt	gaagagatga	tgccggagaa	tttttgtgtg	aaagggcttg	1140
aactctttc	actgttccta	ttcagagata	ttttggaatt	atatgactgg	aatcttaaag	1200
gtcctttgtt	tgaagacagc	cctccctgct	gcccaagatt	tcatttcatg	ccacgttttg	1260
taagatttct	tccagatgga	ggaaaggaag	tgctgtccat	gcaccagatt	ctcctgtact	1320
tgttaaggtg	cagcaaagcc	ctggtgcctg	aggaggagat	tgccaatatg	cttcagtggg	1380
			aatgcaaagg			1440
			aactggatcg			1500
			ggatacgccc			1560
	tgtgaaactt					1594

<400> 5093

<211> 1077

<212> DNA

```
<221> misc feature
     <222> (1)...(784)
     <223> similar to gi3128218 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5094
ccacagctat ttacaggaat tettteteec tggaaaggac tactgetgta eggeeeteea
                                                                        60
ggtacaggaa agactttact ggccaaagct gtggccactg aatgtaaaac aaccttcttt
                                                                       120
aacatttctg catccaccat tgtcagcaaa tggagagggg attcagaaaa actcgttcgg
                                                                       180
gtgttatttg agettgeeeg etaceaegee ceateeaega tetteetgga egagetggag
                                                                       240
teggtgatga gteagagagg cacagettet gggggagaac atgaaggaag cetgeggatg
                                                                       300
aagacagagt tactggtgca gatggatggg ctggcacgct cagaagatct cgtatttgtc
                                                                       360
ttagcagett ctaacetgee gtgggagetg gaetgtgeea tgttacgeeg eetggagaag
                                                                       420
aggattetgg tegatetece cageegggag gecaggeagg ceatgateta ceaetggetg
                                                                       480
cctcctgtga gcaagagcag ggccttggag ctgcacacag agctggagta cagtgtgctg
                                                                       540
agccaggaga ctgagggcta ctcaggctca gatattaagc tcgtctgcag ggaagcagcc
                                                                       600
atgeggeeeg tgaggaagat etttgatgea ettgaaaate accagteaga aaqeaqeqae
                                                                       660
ttacccagga tccagttgga tatagtaacc actgccgact ttctgqatqt qctaactcac
                                                                       720
accaagecet cegeaaagaa tetggeteag agataeteag aetggeaaag agagttegag
                                                                       780
tetgtetgaa accaeattta eeetgaeetg geeacaaagg caaccacaaa gaeeteetag
                                                                       840
tttattaatg tccgtgggag aacaaaatga ttggaatgga aaagagaaaa ttatttttga
                                                                       900
agactggatt aacttgagcc actgtattgt tittggatagc tgagatatat ttattaactt
                                                                       960
accattatcg atgtcagcaa aatattgaga gtttcagtta catacatata tgtgctattg
                                                                      1020
ggtcatacaa tggagatttt tctgacaatt agactccata aaattttaat gaacaaa
                                                                      1077
     <210> 5095
     <211> 375
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(376)
     \langle 223 \rangle n = a,t,c or g
     <220>
     <221> misc_feature
     <222> (5)...(332)
     <223> similar to gi29648 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
```

<213> Homo sapiens

<220>

<400> 5095

60

120

ttcgagcttt tacatcatag agtctggcga agtgagcatc ttgattagaa gcaggactaa

atcaaacaag gatggtggga accaggaggt cgagattgcc cgctgccata aggggcagta

```
<210> 5096
<211> 1538
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(311)
<223> similar to gi4572367 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5096
tgcacctctg tgcggagacc aaggatgatg ccctagcatg gaagacagca ctgctggagg
                                                                       60
caaactccac cccggtgcgc gtctacagcc cgtaccaaga ctactacgag gtggtgcccc
                                                                      120
                                                                      180
ccaatgcaca cgaggccacg tatgtccgca gctactacgg accgccctac gcaggccctg
gegtgaegea egtgatagtg egggaggate eetgetaeag egeeggegee eetetggeea
                                                                      240
                                                                      300
tgggcatgct tgcgggagcc gccactgggg cggcgctggg ctcgctcatg tggtcgccct
getggttetg agecetggga eteggageae tgacecetge gettggattg etagaeteet
                                                                      360
cttcctcctg gaccccatcc tctaccatcc aagccctgtc ccactttggc cctatcctct
                                                                      420
ccattagete etteegggtt tggaceatte ecceeactee etaecettaa teeceacatg
                                                                      480
ggaagaaget atcatcacag gtacaaacat cgettgaagt etteacatet accaetagae
                                                                      540
                                                                      600
acceccaaaa tetgttatag acatttatgg atacatttee tetaaacaca acagggeaca
gcaaatacga cttcatttgg cttcgagttc cccaggcgct gtagacacaa catgaatcgg
                                                                      660
getetetget eteteettag ggagetegag teetggtggg gagaacagga gtaaacaagg
                                                                      720
acttgacaaa gctgaagagt tatcagtcct ttgacaagga caggtggggc agggagcaag
                                                                      780
acaggtaggc tggaagaaca gttattggca agtatgcaga gccgtgaacg tcatggcatg
                                                                      840
tccaaggaat taaatgggag ttcatttggg ctggggtgga ggctgggatc agaccgtggt
                                                                      900
gggccttcaa gctaaggagc ttcctaggtg aaaggggaga tgtgagcctt ctctggaggg
                                                                      960
aagtttcatg attgcatcta taatgaatat attgcctgtt ttgtgaatac tgacacatgt
                                                                     1020
ccatacctaa aacactcctg agttaagtcc catccttccc acaaacagct tcctggctgg
                                                                     1080
tacccatgat aacaattgag ctgaacctgg ggacccctgg ttgggggaaca ggtgagttct
                                                                     1140
atttgagact tecageceta gaaagetgee teegteeaga aatgeetete acaccaggag
                                                                     1200
ctcggccctc tctttgtagc tgtgactgtc accctctcag gctttgtctc atccttcatt
                                                                     1260
ctgaataaga tggcagtgtt ctcctctggg gcctgatcca cctctacacc agcccaggaa
                                                                     1320
geoceatetg tgeetgeeet eaggtggtee accagtetee ecetttggtt ecetteeagt
                                                                     1380
ctcttccccc tttctatccc aatcaccaat agaaatgcta acatccctgc ctggtagcca
                                                                     1440
gactagecea ctaaagetee cetgtaaatg ggggeteeat tagttetget geegagaeta
                                                                     1500
ataaagattt ggttggctct agccgtacaa aaaaaaaa
                                                                     1538
```

```
<211> 426
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (19)...(340)
<223> similar to gi5771403 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5097 tttcgtgttt:cagaggcccc tcggtttgag tccatcatgg aggacgtgga ggtgggggct 60 ggggaaactg ctcgctttgc ggtggtggtc gagggaaaac cactgccgga catcatgtgg 120 tacaaggacg aggtgctgct gaccgagagc agccatgtga gcttcgtgta cgaggagaat 180 gagtgeteec tggtggtget cageacgggg geccaggatg gaggegteta cacetgeace 240 gcccagaacc tggcgggtga ggtctcctgc aaagcagagt tggctgtgca ttcagctcaa 300 acagctatgg aggtcgaggg ggtcggggag gatgaggacc atcgaggaag gagactcagc 360 gacttttatg acatecaeca ggagategge aggggtgett teteetaett geggegeata 420 gtggag 426

```
<210> 5098
<211> 5205
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(2964)
<223> similar to gi5689401 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5098
ggaacctcaa cccggtgtgg gaggagaatt tccactttga atgtcacaat tcctccgacc
                                                                       60
gcatcaaggt gcgcgtctgg gacgaggatg acgacatcaa atcccgcgtg aaacagaggt
                                                                      120
tcaagaggga atctgacgat ttcctggggc agacgatcat tgaggtgcgg acgctcagcg
                                                                      180
gcgagatgga cgtgtggtac aacctggaca agcgaactga caaatctgcc gtgtcqggtg
                                                                      240
ecateegget ceacateagt gtggagatea aaggegagga gaaggtggee cegtaceatg
                                                                      300
tecagtacae etgtetgeat gagaacetgt tecaettegt gacegaegtg cagaacaatg
                                                                      360
gggtcgtgaa gatcccagat gccaagggtg acgatgcctg gaaggtttac tacgatgaga
                                                                      420
cageceagga gattgtggae gagtttgeea tgegetaegg egtegagtee atetaecaag
                                                                      480
ccatgaccca ctttgcctgc ctctcctcca agtatatgtg cccaggggtg cctgccgtca
                                                                      540
tgagcaccct gctcgccaac atcaatgcct actacgcaca caccaccgcc tccaccaacg
                                                                      600
tgtctgcctc cgaccgcttc gccgcctcca actttgggaa agagcgcttc gtgaaactcc
                                                                      660
tggaccagct gcataactcc ctgcggattg acctctccat gtaccggaat aacttcccag
                                                                      720
ccagcagccc ggagagactc caggacctca aatccactgt ggaccttctc accagcatca
                                                                      780
cettettteg gatgaaggta caagaactee agageeegee eegageeage caggtggtaa
                                                                      840
aggactgtgt gaaagcctgc cttaattcta cctacgagta catcttcaat aactgccatg
                                                                      900
```

```
aactgtacaq ccgggagtac cagacagacc cggccaagaa gggggaagtt cccccagagg
                                                                      960
aacaggggcc cagcatcaag aacctcgact tctggtccaa gctgattacc ctcatagtgt
                                                                     1020
ccatcattga ggaagacaag aattectaca ctccctgcct caaccagttt ccccaggagc
                                                                     1080
tgaatgtggg taaaatcagc gctgaagtga tgtggaatct gtttgcccaa gacatgaagt
                                                                     1140
acgecatgga ggageacgae aageategte tatgeaagag tgeegaetae atgaacetee
                                                                     1200
acttcaaggt gaaatggete tacaatgagt atgtgaegga actteeetee tteaaggaee
                                                                     1260
gcgtgcctga gtaccctgca tggtttgaac ccttcgtcat ccagtggctg gatgagaatg
                                                                     1320
aggaggtgtc ccgggatttc ctgcacggtg ccctggagcg agacaagaag gatgggttcc
                                                                     1380
ageagacete agageatgee etatteteet geteegtggt ggatgtttte teecaaetea
                                                                     1440
                                                                     1500
accagagett tgaaateate aagaaaeteg agtgteeega eeeteagate gtggggeaet
acatgaggeg ctttgecaag accateagta atgtgeteet eeagtatgea gacateatet
                                                                     1560
ccaaggactt tgcctcctac tgctccaagg agaaggagaa agtgccctgc attctcatga
                                                                     1620
ataacactca acagctacga gttcagctgg agaagatgtt cgaagccatg ggaggaaagg'
                                                                     1680
agetggatge tgaageeagt gacateetga aggagettea ggtgaaaete aataaegtet
                                                                     1740
tggatgaget cageegggtg tttgetacea gettecagee geacattgaa gagtgtgtea
                                                                     1800
aacagatggg tgacatcctt agccaggtta agggcacagg caatgtgcca gccagtgcct
                                                                     1860
gcagcagegt ggeccaggae geggacaatg tgttgeagee cateatqqae etqetqqaea
                                                                     1920
gcaacctgac cctctttgcc aaaatctgtg agaagactgt gctgaagcga gtgctgaagg
                                                                     1980
agetgtggaa getggttatg aacaccatgg agaaaaccat egteetgeeg eeecteactg
                                                                     2040
accagacgat gategggaac etettgagaa aacatggcaa gggattagaa aagggcaqgg
                                                                     2100
tgaaattgcc aagccactca gacggaaccc agatgatctt caatgcagcc aaggagctgg
                                                                     2160
gtcagctgtc caaactcaag gatcacatgg tacgagaaga agccaagagc ttgaccccaa
                                                                     2220
agcagtgege ggttgttgag ttggeeetgg acaccateaa gcaatattte caegegggtg
                                                                     2280
gegtgggeet caagaagace tteetggaga agageegga cetgeaatee ttgegetatg
                                                                     2340
coctgtcact ctacacgcag gccaccgacc tgctaatcaa gacctttgta cagacgcaat
                                                                     2400
cggcccaggg cttgggtgta gaagaccctg tgggtgaagt ctctgtccat gttgagctgt
                                                                     2460
teacteatee aggaactggg gaacacaagg teacagtgaa agtggtgget gecaatgace
                                                                     2520
tcaagtggca gacttetgge atetteegge egtteatega ggteaacate attgggeece
                                                                     2580
ageteagega caagaaacge aagtttgega ccaaatecaa gaacaatage tgggeteeca
                                                                     2640
agtacaatga gagetteeag tteaegetga gegeegaege qqqteeeqaq tqctatqaqe
                                                                     2700
tgcaggtgtg cgtcaaggac tactgcttcg cgcgcgagga ccgcacggtg gggctggccg
                                                                     2760
tgötgdaget gegtgagetg geddagegeg ggagegeegd etgetggetg degeteggde
                                                                     2820
geogeateca catggacgae acgggeetea eggtgetgeg aatceteteg cagegeagea
                                                                     2880
acgacgaggt ggccaaggag ttcgtgaagc tcaagtcgga cacgcgctcc gccgaggagg
                                                                     2940
geggtgeege geetgegeet tagegegge ggteggeega geggeactge geetgegegg
                                                                     3000
agggcgctgg gcggggaggg acggggcttg cgccttggtg ggacctcccc aggggcgggg
                                                                     3060
cteggggggc tecaegecaa gggtgggetg egectaegec ettgaeteag ettteeettt
                                                                     3120
tggggaatta ggaatggagg atgeeeegee etetegggag geeaegeeea agggegegae
                                                                     3180
gaaggaagga gccacatccc caacttgagg ccacgcccc agcacctagg gggcattttg
                                                                     3240
agcogggatg ggggaaacct cgtccctatg gaggaggcca catcccgggg ctctqqtacc
                                                                     3300
gggaggcacc acctcatgtc ccctggaaaa gccataagat gggacccaga cccctgggac
                                                                     3360
cccagaccaa ttgccaagta tggaaatctc agctccctcg agggggggcc ctgggcaagg
                                                                     3420
ggtagggete tetggagege ecetetaggt ggeetgggga etggagggae eaggatgetg
                                                                     3480
gttggagggt cccggaatac cggagtccct ttagatattt gtgcaaaaaa taaatggggg
                                                                     3540
gagggggag gatgggattt caaaagcaca tgcgcccttg ggcgcccaaa ccctgggggc
                                                                     3600
cgaggggacg getetggtte eccaegetge ecctaettee etttgggagt ttgeetetee
                                                                     3660
ctctcccca acaaacccag tcctcatatc atagagttca acacacccat ttgacagatg
                                                                     3720
gcaaaactga ggcttaaaga gctgcttgag acttggccaa ggttccaggt gccataccct
                                                                     3780
ctgtgcccct cccttaggcc tgtgtgcccc atggaagggt gggctgagat cgggatgacc
                                                                     3840
tgacacaget cectattget getaatteec ceteggeete etecaagggg tgggaattee
                                                                     3900
aggecaagae ecetaetteg cettteette teeggetgee aageaggaee tttgeeetea
                                                                     3960
gecetttete etgggatete catgggggat gecatgaggg eeteccaeca caaaagagaa
                                                                     4020
tttgggatcc cctggtccca ggtttctcca tcccttcttc cttttccaga attttccaaa
                                                                     4080
taggaaagaa cagaaggaga ccagaaactc taggggggag aaagagaatg agagaaagag
                                                                     4140
aatgagagag agagaaacac aaacacagtg acacagtgag agcttagtct ccaagagcct
                                                                     4200
atteattgat teaaacacce aageeacagg ataceteaga tggeeetett geeagetgga
                                                                     4260
agetetttet ecaatgagea aagttacagt gaeetggetg gagttacetg gtgeacatag
                                                                     4320
```

```
4380
gaccttaggg gaaagttcag cgtggactac acttgctctg ggatctgctt ttccacatgt
gtgtatggca cgcctttttc tgctggattg ggaaggacaa gattttgctg tgctagggag
                                                                     4440
aàatgaaaac ggggtgagct gagtagctgg gtttctggag gatagaacat cagatgggga
                                                                     4500
                                                                     4560
ggctttccga ggtgaagaat gagagggaac cacttactag agagaaaaga gctccaggcc
tggggaacag cacgtgcgaa ggccaggaga gaagaactgt tgaaacaacg agaagggtgg
                                                                     4620
cacggctgga gctgagccag caagggggat cgtgaggagc cttggggttg gggagatctg
                                                                     4680
cagaagcatc agaccaggca gggcctcgta cgcagtcctg aggagtttta cttttattct
                                                                     4740
aagacagttg gggageteca ggagetgttt taagttgggg agagaetgga ttecageetg
                                                                     4800
caaaagctgt tttgtgaaga ctaaaaccag tgaggagagg tggaggtgct ttggggacac
                                                                     4860
                                                                     4920
tgaaatggat tettggaaag attetgaagg etgtgttgaa aagacaceta tagetgtggg
gacatgacta taatcccagc atttggggag accgaggctg gcagatcact taaggtcagg
                                                                     4980
agtttgagac cagcctggcc aacatggcga aaccccatct ctgctaaaaa tacaaaaatt
                                                                     5040
agetgggtge agtggtgeat geetgtagte ceagetacte aggagaetga ggegggagaa
                                                                     5100
ttgtttgaac cctggaggca gaggttgtag tgagtcgtga tcacacaact gcactccagc
                                                                     5160
ctgggcaaca gaacaatact ccattccctc ccctctaccc cacca
                                                                     5205
```

```
<210> 5099
<211> 2494
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(813)
<223> similar to gi5912067 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5099
gcctgagatc tccagggagc aggccatcgc gctcctcaag gaccaggagc cgggggcctt
                                                                       60
catcatcege gacagteact cetteegagg egegtaeggg etggecatga aggtgtette
                                                                      120
gccacctcca accatcatgc agcagaataa aaaaggagac atgacccatg agctggtcag
                                                                      180
geattttetg atagagaetg geeceagagg agteaagete aagggetgee ceaatgagee
                                                                      240
aaacttegga tegetgtetg eeetggteta eeageaetee ateateeeat tggeeetgee
                                                                      300
ttgcaagctg gtcattccaa accgagaccc cacagatgaa tcgaaagata gctccggccc
                                                                      360
tgccaactca actgcagacc tgctgaaaca aggggcagcc tgcaatgtgc tcttcgtcaa
                                                                      420
etetgtggae atggagteae teaetgggee acaggeeate tetaaageea catetgagae
                                                                      480
gttggctgca gaccccacgc cagctgccac catcgttcac ttcaaagtct ctgcccaggg
                                                                      540
aatcactctg actgacaacc agagaaagct ctttttcaga cgccactacc ctctcaacac
                                                                      600
tgtcaccttc tgtgacctgg atccacagga aagaaagtgg atgaaaacag agggtggtgc
                                                                      660
ecctgetaag etettegget tegtggeeeg gaageaggge ageaceaegg acaaegeetg
                                                                      720
ccacctettt getgagettg accceaacca geeggeetet geeategtea acttegtete
                                                                      780
caaggtcatg ctgaatgccg gccaaaagag atgaaccctg ccccttgccc agggccagtg
                                                                      840
ccatggggaa ggggcttgtg gggaggggac ccatgaatcc tgaccactct tgaacccaga
                                                                      900
aggaggactt tgggccaatt tcggaggaga gaagaaagtg caacgtgggg agagggaagt
                                                                      960
gaattgcaga ggggaggggg aaaagagaga gagagagaga gagagagaga gagagaaaga
                                                                     1020
tgggggagaa gaacttggat tcccctgggt agatggaaac tgcaaaaacc caaagcctcc
                                                                     1080
aaaactaacc aggtccacct aacaccccct ccctccccta agaagatgga tgtcctcaaa
                                                                     1140
agagaaggaa caaacctcct tgggaatcca cattttttgg gggaatggaa aagctctgtc
                                                                     1200
tecetaaete aactgetttg daaggggaaa teaagetggg agaatetttt tetggeeace
                                                                     1260
tgtagggtag gttgtcaaac caaacagagc caccgtggga catcaagtgg aagaacttgt
                                                                     1320
```

>

```
ttgcttgaaa gtatctcaga cccaaggcac ctcaggtctc tttgctgtgc ctccactata
                                                                     1380
                                                                     1440
ttgtcgtqtq ggtgtgtgtc tgcacccaca tcctcacaca ttgatctaga tctgccttta
                                                                     1500
tccactcgaa ttataaacag ctcggcttgt ccttgtccca tgtgtttgta gacacacatg
                                                                     1560
catactgtcc aaagattagg gttggtggtg gcagtgcagc aggggaggga caaacaacca
                                                                     1620
agetatgggt gacagagget eteteetggt geetgeacet geactetagt gaccetgggt
                                                                     1680
geegecagae cettetette tacaaagaee eeageaggag tgggagggte tgcaatggca
                                                                     1740
tegecetgte etgeettgge cagaageetg gagetttggt ttgaggaggt agagatatgt
gtatccatag gaagagatct gtcagaacag gcagctgttg agctcggggt gtcttcccca
                                                                     1800
aggcatgtgg ctcagcagca agaaaggcaa gttgctcctg ctggggccct ggactctgcc
                                                                     1860
ttagetecca ecteteagee ttgttattgg gttteatgee eetggaeeag eettatetea
                                                                     1920
                                                                     1980
gacetgetta cetgeatgat geetttttgg gggetgggga ttgagtettg etgetetgee
cagccetgtt ctattetgca gggtecetgt gttggaatte teeetgggga acetaettte
                                                                     2040
tgctcagtga ggctccggcc agaaacctgg agtccttatc ctcccctctg taagtgtttt
                                                                     2100
agggtetgge ttttgeagge accetetgae etcageagag etcetgggee tgetgeetge
                                                                     2160
acaccacate geetacetae aatgeeaaag ceteaetgte accetttetg cettggttte
                                                                     2220
cctagctgag ccacgctgcc catgcagcag agggcagaag gcttgcactt gggccaaagg
                                                                     2280
gectaaggte caetggacag ttgggaaaac acetgaccae catttaagga etetaageca
                                                                     2340
gaatggaaaa ttcaccagga ctccattctt aagcctatgc gagtccccta gagaqaggca
                                                                     2400
ttgtactgat atataaatat tatataatat atacatgaga catactgaca gaatctgtaa
                                                                     2460
gctaataaaa tgtaagaaaa ggttaaaaaa aaaa
                                                                     2494
```

```
<210> 5100
<211> 683
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(529)
<223> similar to gi2232013 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5100
gtatggggtc cacacaggaa agaaaccaaa ctgttttggg gaatatggaa aaggcttcat
                                                                       -60
teegaggetg gatttgtgta ageatgggae gateeacaea ggagagaaae catataattg
                                                                      120
taaagaatgt gggaagaget teagaeggte eteetatett ttgateeate agegagteea
                                                                      180
cactggagaa aagccataca aatgtgacaa gtgtgggaag agctacatta ctaagtcagg
                                                                      240
tettgaettg caccacagag decacacagg agagagaeet tataactgtg atgaetgtgg
                                                                      3.00
gaagagettt agacaggeet caagtatttt gaateataag agacteeatt geegaaaaaa
                                                                      360
accattcaaa tgtgaggatt gtggaaagaa gcttgtatac cggtcatacc gtaaagacca
                                                                      420
acaaaaaaac cacagtggag aaaatccatc caaatgtgaa gactgtggga agcgctacaa
                                                                      480
gaggcgcttg aatcttgata taattttatc attatttta aatgacacgt aagtgttgta
                                                                      540
catatttatg gggtacagtg tgatatttaa atatatgtat atgatgtata atgatcaaat
                                                                      600
cagtgtaatt agcacattta tcacctcaat tatctctttt ttgtgttgag aaaattaaaa
                                                                      660
attcattgtt ccaaaaaaaa aaa
                                                                      683
```

```
<210> 5101
<211> 393
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (52)...(139)
<223> similar to gi603672 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5101 aagcattgtg gaattgtggg tgttaagttt tgtttgtttg ttttttaata ggcttattat 60 gcccgtgatg ctctggctaa aaacctctac agcaggttgt tttcatggtt ggtaaatcga 120 atcaatgaaa gcattaaggt actgaatttc tatgagcaaa atcagttgta ataaatggta 180 ttcacagtat aaacattaag ttgaagaaag tttaaattta taatcaaata attgattgcc 240 acttacaaag attattcctt aaaaagagtg taccatgtat aagattgaaa tttgtcaggg 300 attttgttta ttttgttttg ccatgtgtgt tgcttctgac tggtgaatag tctgatggtc 360 tttgtggagt tactctggga gtcggcgtcc cag

```
<210> 5102
<211> 1838
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(208)
<223> similar to gil770576 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5102
tcaggtttat gatgggtttt cattcattgg caacactgga ccttacgagg tttctaagaa
                                                                       60
gctgtatacc ttgaaacaaa gtttggccaa agtggagaat gcttgttatg ccttgaaagt
                                                                      120
cagagggtca gaaattccaa aacatatgtt ggcagatgtg ttttcagtta aaacagaaat
                                                                      180
gatagatcaa gaagagggca tttcttagaa tctaacgtta ctcagttact aattcttttg
                                                                      240
agaacteeta agagaccaat ttgtaagaet tatttagtat tteatttaac tttattgtgg
                                                                      300
cttttacata gaaacatatt cagttgtact tgttttaaat tgtatacaag ctgtacataa
                                                                      360
aattagocaa atgaatcatt tottatatot tattoatgaa agtttgoata cagatgtttg
                                                                      420
catatatgcc tttttgaatt tttgctggtt aacctttatc atttatcttt gtaatgtgaa
                                                                      480
catgetteag agtgtacett ttgccataac ctattttaat ttaetttte tgaagtttgg
                                                                      540
agtgataatt tttagtggaa gcaatttgta atttaagttg gtagttatat tatatataga
                                                                      600
aaagattttt tagttaaact tetggacatg agegteetgt ttaaatttet tottaatate
                                                                      660
gtgccaagcc tcaaaaatag gcttattcca tggaacaaga attaaaaatg aataagctat
                                                                      720
caatatataa tttaagtaca agtttaggct gggcgtggtg gctcacgcct gtaatcccag
                                                                      780
cacttiggga ggccgaggta ggcagatcac gaggtcaaga gatcaagacc agcctgacca
                                                                      840
acgtggcgaa acctcgtctc tactagaaat acaaaaatta gctggatatg gtggtatgtg
                                                                      900
```

```
cctgtaatcc cagctacttg ggaggctgag gcaggagact cgcttgaacc tgggaggcag
                                                                      960
aggttgcagt gagccgagat tgcgccactg cactccagcc tgggtaacag agcaagactc
                                                                     1020
                                                                     1080
catctcaaaa aaaagaaaga aagaaaaaaa gaaagtacaa gtttataaag tattatagtg
aaaaattcgc attctggctg attttaagcc atttaaaatt tatataaaac aaccttccat
                                                                     1140
                                                                     1200
aaaaatttga caggtgccca gatgttgctt tctccattta ttttttgttt tttttaatc
acagtaggtc tgatagagaa ttggagctaa attataatat ttttgttggt aaagttgagt
                                                                     1260
tatatacttg tacatacaat ggaaatgctt ttagtagtga ttatttagca atttttgttt
                                                                     1320
ttgttatatt aggcatgttt ggaggctttc ctattctagc atttaaattt aaattttatt
                                                                     1380
aaaattaaat aatttaaatc tagcatttaa atttaaataa tttaagtcta gcatttactt
                                                                     1440
ttaaataatt ataatgaagt tttgaaatac taagttaatc cagaccttta gttgtcccat
                                                                     1500
ggtgttaata aagttgccaa agaagatgta ttatgaacaa ttcagcaata agacaattgt
                                                                     1560
caacacagtt gagaataaca atggtaatcg ttagtaatat ttagaattgg aatttgccta
                                                                     1620
ctgaaatagt tatagatgat tacttgtgat gtgaaactga attgagcatg acaaccagac
                                                                     1680
atttccagtt ggttttgtaa gttttgagaa tctagatact gggttttatt ttttgaaaga
                                                                     1740
ttagctctgt ttgtaagggc tgattccttg aaaatgtaat tttccagaaa aacacctaaa
                                                                     1800
gaaaataaaa catggacatg cctagtaaaa aaaaaaaa
                                                                     1838
```

```
<210> 5103
<211> 1646
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (40)...(291)
<223> similar to gi606976 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5103 taccgggccg gaatctcccg cgtccgcca cgcgtccgct tcatctatca cctgcctcag 60 gagtttggtg atgeggaact catacagaca tteetgeeet ttggageegt tgtetetget 120 adagtetttg tggategage caccaaccag ageaagtgtt ttgggtttgt tagttttgae 180 aatccaacta gtgcccagac tgctattcag gcgatgaatg gctttcaaat tggcatgaag 240 aggeteaagg tecagetaaa geggeeeaag gatgeeaace ggeettaetg acetgettte 300 actgaccagc cacagaaaga aacagaagag tgagaagaaa ggagaggaaa agcacagaaa 360 cgcttgagca gccctttccc gaaggagcag ctgcggacgg aggtggatcg gacccaaggc 420 tggtgcctgg ggctaaggcc actctaagga ttgtttttat caagtgggtt gttctgtgcc 480 tgcagcatag agcgcaggct ggcagagcaa atagggctgg tgaggagtga ctgtccaggg 540 gaaccagcag agggcgttgg gggtgccaag ggcttctccg caagggaagc ccagatttac 600 ttctttcaaa atcatatcat tccttagagt ttagggacca aaggactatt gctttttaa 660 gaatatatat atctatataa attaaaacaa agaaacaaac aaacaaaaaa caagacaaac 720 aactacaaaa aaagacagta tagagtotoa taaaagotgo otttaaatat oootaggaga 780 cagggtgaag gagaccettg acagececag cetaggeaga tgggggetgt ggaaagattg 840 ttetgtgtet cattecetet taagecaete ecceaecetg ecettttaaa aataattaag 900 gatttgaggt ctaggctcac atgcaggtaa ttagaacgtt atggaagcag tgaacccaca 960 atccacaatc cccaaactca gagtgcatcc cagaagaggc cccaggcaga gctcaggttg 1020 gccctggcct ttgccatccc gggaggcccc ctagccagca agagtgggat tgcctttcct 1080 gtggaaccac tgcttcccca ggcgggaaga aagagggagt tctggccacc tgagcctttc 1140 cettgecaat ceaggaagae agaggeeetg cetttggetg agetgagaea ceteetgttt 1200 ecetteecet tgaaceagte ecagtgteec ettgeteeag getacettet gtetettagt 1260

```
ctaagtttgc ccacctgtaa agtagattca ggatatctgt agagggctgt gacaacagac 1320 ttggaaggtt tgctactgta tatactgcca ttgagaaggg gaaatttttc aatatgtaga 1380 agcttcagaa ttagaggtcc ctctttaccc cagacctggg agggaagtag atgttttgcc 1440 aaaatacttc ttcattcctt taaaaactac atctttccta tgcaagagtg tctcacatgt 1500 gcttaaccga ggtgcttcta gttggtgagc agtgttgagc ttaaaagtgg ggtgtgctct 1560 gtctgtctgt ctttgtctgt ctgttgtata cagtgggtgc catataaagc tgatcaatgg tggtgctct tggtggtgctct ctgtgg
```

```
<210> 5104
<211> 1746
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (699)...(1629)
<223> similar to gi3851703 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5104 60 geggeegeet aetggagaea eteceteeeg eeteeegggt eteetggegg eggeggagtg aggetgaeag egtgggaace tgtggagaee ceteegeeet eeeegeggtg geageggeeg 120 atccccggct ccggcgcgag acgacggccg cgatgcgctc ggcctgaggt tacccgggcc 180 240 egecectite etegeticee tegactatic caetgegiet eegegeeeeg gegieateet gcgagtccct ctgacgggag ggaagatggc tgcacggagc tggcaggacg agctggccca 300 gcaggccgat ggagggctcg gccggacatg cgggaaatgc tctcggtcgg cctaggcttt 360 etgegeaceg agetggggee tegacettgg ggetggagee gaaaeggtae eeeggetggg 420 tgateetggt gggeaetgge gegeteggge tgetgetget gtttetgetg ggetaegget 480 gggccgcggc ttgcgccggc gcccgcaaaa agcggaggag cccgccccgc aagcgggagg 540 600 aggeggegge egtgeeggee geggeeeeeg aegaeetgge ettgetgaag aateteegga gcgaggaaca gaagaagaag aaccggaaga aactgtccga gaagcccaaa ccaaatgggc 660 720 ggactgttga agtggctgag ggtgaagctg ttcgaacacc tcaaagtgta acagcaaagc agccaccaga gattgacaag aaaaatgaaa agtcaaagaa aaataagaag aaatcaaagt 780 840 cagatgctaa agcagtgcaa aacagttcac gccatgatgg aaaggaagtt gatgaaggag 900 cctgggaaac taaaattagt cacagagaga aacgacagca gcgtaaacgt gataaggtgc 960 tgactgattc tggttcattg gattcaacta tccctgggat agaaaatacc atcacagtta 1020 ccaccgagca acttacaacc gcatcatttc ctgttggttc caagaagaat aaaggtgatt ctcatctaaa tgttcaagtt agcaacttta aatctggaaa aggagattct acacttcagg 1080 tttetteagg attgaatgaa aaceteactg teaatggagg aggetggaat gaaaagtetg 1140 taaaactete etcacagate agtgeaggtg aggagaagtg gaacteegtt teacetgett 1200 ctgcaggaaa gaggaaaact gagccatctg cctggagtca agacactgga gatgctaata 1260 caaatggaaa agactgggga aggagttgga gtgaccgttc aatattttct ggcattgggt 1320 1380 ctactgctga gccagtttct cagtctacca cttctgatta tcagtgggat gttagccgta atcaacccta tatcgatgat gaatggtctg ggttaaatgg tctgtcttct gctgatccca 1440 1500 actictgattg gaatgcacca gcagaagagt ggggcaattg ggtagacgaa gaaagagctt cacttctaaa gtcccaggaa ccaattcctg atgatcaaaa ggtctcagat gatgataaag 1560 aaaagggaga gggagctctt ccaactggga aatccaaaaa gaaaaaaaa gaaaaagaag 1620 aagcagggtg aagataactc tactgcacag gacacagaag aattagaaaa agagattaga 1680 gaagacette cagtgaatac etetaaaace egtecaaaac aggaaaaage ttttteettg 1740 aagacc 1746

```
<210> 5105
<211> 3172
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(2191)
<223> similar to gi3319990 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5105 gttatgaagc accacaaact gttgcggttg aacctccacc tatcaagtca gcagtacaga 60 egatgtgtee catacetgee cattetttgg etgettttgg attatttett egtetteegg 120 gctatgcgga agtgctactg aaagagagaa aacatgccca gtgccttctt cgattggtat 180 tgggagtgac agatgatgga gaaggaagtc atattettea atetecatea gecaatgtge 240 ttccaaccet teetttecae gteettegta gettgtttag cactacacet ttgacaactg 300 atgatggtgt acttetaagg eggatggeat tggaaattgg ageettaead eteattettg 360 tetgtetete tgetttgage caccattece cacgagttee aaactetage gtgaatcaaa 420 ctgagccaca ggtgtcaagc tctcataacc ctacatcaac agaagaacaa cagttatatt 480 gggccaaagg gactggcttt ggaacaggct ctacagcttc tgggtgggat gtggaacaag 540 cettaactaa geaaaggetg gaagaggaac atgttacetg cettetgeag gttettgeca 600 gttacataaa tcccgtcagt agtgcggtaa atggagaagc tcagtcatct catgagacta 660 gagggcagaa cagtaatgcc ctteettetg taettetega getteteagt cagteetgee 720 tcatcccagc catgtcatct tatctacgaa atgattcagt tctggacatg gcaagacatg 780 tgccactcta tcgggcactg ctggaattgc ttcgggccat tgcttcttgt gctgccatgg 840 tgcccctatt gttgcccctt tctacagaga acggtgaaga ggaagaagaa cagtcagaat 900 gtcaaacttc tgttggtaca ttgttagcca aaatgaagac ctgtgttgat acctatacca 960 acceptitaag atctaaaagg gaaaatetta aaacaggagt aaaaccagat gceptctgatc 1020 aagaaccaga aggacttact cttttggtac cagacatcca aaagactgct gagatagttt 1080 atgeageeae caccagtttg eggeaageaa atcaggaaaa aaaactgggt gaatacteea 1140 agaaggegge tatgaaacce aaacetttgt cagtattaaa gteaettgaa gaaaaatatg 1200 tggctgttat gaagaaatta cagtttgata cgtttgaaat ggtttctgaa gatgaagatg 1260 ggaaattggg atttaaagta aattaccact acatgtctca ggtgaaaaat gctaatgatg 1320 cgaacagtgc tgccagagct cgccgccttg cccaggaagc tgtgacgctt tcaacctcac 1380 tgcctctgtc ttcatcctct agtgtgtttg tacgctgtga tgaggagcga cttgatatca 1440 tgaaggttet aataactggt ccageggaca eccettatge aaatggetge tttgagtttg 1500 atgtgtattt tcctcaagat tatcccagtt caccccctct tgtgaatcta gagacaactg 1560 gtggtcatag cgtgcgattc aatccaaacc tttataatga tggcaaggtt tgtttaagca 1620 tettaaacae gtggcatgga agaccagaag agaagtggaa teetcagace teaagetttt 1680 tgcaagtgtt ggtgtctgtc cagtccctta tattagtagc tgagccttat tttaatgaac 1740 cgggatatga acggtotaga ggcactccca gtggcacaca gagttotcga gaatatgatg 1800 gaaacattog acaagcaaca gttaagtggg caatgotaga acaaatcaga aaccottcac 1860 catgittitaa agaggtaata cacaaacatt titactigaa aagagtigag ataatggccc 1920 aatgtgagga gtggattgcg gatatccagc agtacagcag tgataagcgg gtaggcagga 1980 ctatgtctca ccatgcagca gctctcaagc gtcacactgc tcagctccgc gaagagttgc 2040 tgaaacttcc ctgccctgaa ggcttggatc ctgacactga cgatgcccca gaggtgtgca 2100 gagccacaac aggtgctgag gagactctaa tgcatgatca ggttaaaccc agcagcagca 2160 aagaacteee eagtgaette eagttatgag etgeattgat gtggaettea tagacacaaa 2220

```
ggcttcgaag cacaagccaa atatgtcaat atttgtatgt aagaaactaa ttatgtaata
                                                                 2280
ggtaatgaaa ctgaaactat actatgccct taaggagatc cagtttaatt caaggtgatc
                                                                 2340
                                                                 2400
ttttatttac ctgtacagga gtgtaaactt ttttgtgctt ttatttttca attgtgagaa
ccactgattg gtatgttcaa caaatttgtg tatacaaaga aatggataaa tcactgctat
                                                                 2460
2520
tttactatag agtgaggggt tgttaacaaa gaatatatat tggtcattct tacaactact
                                                                 2580
atttaaagtc agcaactttt cactgaattt gatagatttt atgtttggcc atatcttcat
                                                                 2640
                                                                 2700
gctcacattt gatttctgaa gacctcctac atacacttca ataaaagtta aatggacata
ctccctcttt tttgatttac tggtacattt ttaaaataat aaatctgcca taaaatgcat
                                                                 2760
tatatctgga gacttgcact tgtatggatg aatttattac attcaacata tttaatttta
                                                                 282.0
tgccttctaa ttctaagatg cagaaaaaaa taaatgaaca tgattttatt ctatgcccaa
                                                                 2880
catttgggcc tctgaatgta tctgttattt gaatttaagt atttgaaaag gaatggtcaa
                                                                 2940
tttgaaagtc attctaaact gatttttttt ttcctaaagg gctccttttt tcctggacta
                                                                 3000
tgtggtttta tgactaaagt cacatgtatg tattaaacat tgaggctctg tagaggagag
                                                                 3060
                                                                 3120
aggatgtacc tetetggtge tgttacagta cattetgtac etgecataca ggeteatttt
catgcaaatt cttcctagag ccaaataaat aaagacttag gtgaaaaaaa aa
                                                                 3172
```

```
<210> 5106
<211> 5618
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5619)...(4060)
<223> similar to gi5689389 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5106
ttttttttt ttcataaaga aagaaacggc aatgcaattt aaaaactggt aggccgttta
                                                                    60
aaagageegg tttgacetet gacaaaceea gecaagacaa ggeeeettgg eeeggetege.
                                                                   120
gagtetttgt agagageaga gettaceetg aegaegatgg egttttgtgg ttaaagtgae
                                                                   180
ttgggcgcac ccccaggaca gggtctggtc ccacacgttc acaccagggg ggcgggaggg
                                                                   240
gggacatcaa aaacagacca catcetetge cagaeggget ceagggagta geggtttgga
                                                                   300
cgagggacat ttacaaagca cagagtgcac aaataagttt tggttaattt accaaattac
                                                                   360
acagcagtcc ttcaagtttt tcaagtttca taaaaaggag gaggggagga gaaaggggga
                                                                   420
480
ctgaagaaaa ataataaacc agattaacaa cacaactgta tcgctccaaa gacggacaga
                                                                   540
gaagttgaca ggttcacaca cggtttgcgg tatgtacatc aatttacaga ggttgcgacg
                                                                   600
caggggagag aggttcacac tcgtgttttc gctttgttag aggcgctcgg ccacacccag
                                                                   660
cacccatgtg tgcccagcgc acacgtgcac acgcacccca cgcacggcca cacgcgcacc
                                                                   720
cacgeteget tgcacacacg cecacacgea cagacacgee tgegggeage aggegeaggg
                                                                   780
gagcgcgtat caccagtccg cgtcctcctc tatgtaataa tcaggggcgg taccatcaaa
                                                                   840
gaggccgggg tcgagggact tccgctgctt ccctctggcg aagacgcggg agatggagcc
                                                                   900
gaateceate ttetettet tettttteeg tttttggtet teaagateet etagtgaetg
                                                                   960
tacaataggg ttgtgcaggt tcttctgaac tgggccggga ctgtcgccct gtagccagag
                                                                  1020
gagaagagga agatgaaaca gcagagacag gtgacacagg agagcagagg cggcccgtgc
                                                                  1080
ggtgtggggc cttccgtgga aggatgccat ctctcagggg ccaccctgcc tctgcagtgg
                                                                  1140
ggagcccacc ccccatctcc tgaagcagat acccccagat ggcttattga tggggcctgg
                                                                  1200
agtiticceta gagticctgg ggiccicice tgcccagict ggcctctcaa cccccagcat
                                                                  1260
```

```
1320
cttctgacca acaaattagc cactccaggg cgtctaagtt cctgtcccag tctgtcctct
                                                                     1380
gagttagage tagagettgg ttagacttgg tgettteeat aaagaaatgt acttttatag
aaaaagcaca aaatagagaa ttttgggaca gaaacaaact tgggagacca cgtagcctct
                                                                     1440
                                                                     1500
agettecece acaacegaca caatgaatet ettagtttge geaggggeag geaggacteg
                                                                     1560
ttagccctat tcacagatat caagagaggc agcagacagt ccactaccgt ggagctaatt
                                                                     1620
ggatgcagag ctacagctcc aattgggggc tgtcagattc ctcctggcac agtgctcctt
ccaggcagga gctccagggt aactgcatac ttggtcctga gctttgggct gccccaggag
                                                                     1680
                                                                     1740
gggtctgaac teetteeett ttteetaggg ageeteagae gaeaggteee taggatggge
                                                                     1800
aggtaggaca titccattgt gttgccagcc ctgccttacg tgggtgtgga gggaaccett
aatageetae aggtgtacaa aageetteae tacateecag aateagtetg ceetgtetgg
                                                                     1860
agcccacaga tcctttggat caaaacagtc attactaggg agactcctgg tggttatttc
                                                                     1920
tggaattgca agcataatgc caaggtccgt caaccttctc caacctctct atgctgagtt
                                                                     1980
cctacttttg ctctaaatta gtggccagag tgtgagagga tgaggcagtc attagtccag
                                                                     2040
getgeactat tettgetggt ggacgteaga tgeceaagge aaagggttae etgtagetat
                                                                     2100
ttttgggctc ttcctggctt acctgcatgc acacctgttg agatgggggg ataaaaaggg
                                                                     2160
ttgaggaagt gagggaatta atgaatggta gtttagtctt tagtctcaag gtttgcaaac
                                                                     2220
                                                                     2280
agaatccatt ctgaaggcag ctaagatagt tccactctgg ataggaacat ctttgccaaa
tetatgggta aagagaatgg ggeetgetea etgaaaegee tgtatgeaga caaetggett
                                                                     2340
atcaaagcac ccatttcctg gcagcaggaa tgtgccaagg ctatggtggg caaaagacta
                                                                     2400
gggctgggtc aaatgcaatt caagaggcct ttggagaact ccttctgcag aatggggttt
                                                                     2460
ttccagcage atttctgctg ccagagtccc catgggccca ccacgagaag acaaaatatg
                                                                     2520
gccgtggggg gaaggtattc tcaactggga tgagaatggt gcagggacac tgctggctgt
                                                                     2580
aggtataact ccacagtggt ccttcaggat cagggaatgg atgtcagaga cccctccagt
                                                                     2640
ggcccacctt cettgeettg gttetgttag teaagataga etttgteact aggattetet
                                                                     2700
tetggggaca agagaagaac atactgette etcaaageac cagtataaaa cagagaatee
                                                                     2760
egecaggtge agtggeteat gtetataate ceageaettt gggagaetga ggtgggeaga
                                                                     2820
tegeetgagg teaggagttg aagaceagee tggeeaaeat ggtgaaatet eatetetaet
                                                                     2880
aaaaatacaa aaattagccg ggtgtgatgg caggcatctg taatgccagc tgctcgggag
                                                                     2940
gctgaggcag gagaattgtt tgagcctgga aggtgttggt tgcagtgagc tgagactgcg
                                                                     3000
tcactgcact ccatcctggg tgacaagagt gaaactccat cacacacaca tacaaataaa
                                                                     3060
taaaataaaa caataaaaaa gagaatccca ggcctgagca gggccccagg ctgcaaatga
                                                                     3120
cetteetact etgaggagge catetaaagt eeeegggeea geaatetetg eegeecaeet
                                                                     3180
gagcagactg aggcagcttc tctgaagttt actcttagct atttttataa gcacttttca
                                                                     3240
ttattgtgga ttgaaaaaaa tggttccata attacgactc atctatagga aagtgattga
                                                                     3300
tttttacaca ctgatttcca agcaacactg ttatgtacat gcttattatt cattctaata
                                                                     3360
gcttttcaag ttattctctt gagttctcca ggtagagaat catgtcactq qcaaqtaatq
                                                                     3420
gttttgtcca atgtgttcac ctcatttctt ttttattatc tatttcgctg gttaataaag
                                                                     3480
tgacattaac tgagttttgg aaaaagccgt ctcgtgcatt tgaggatcta accctatgat
                                                                     3540
gtctgtcttc aggatatggc agaggggagc ctctgcatta ccaactgtgt gataaaacaa
                                                                     3600
aaattcaagg tggtccccac acccagaccc caatatttca tgttagagcc tcgacatggc
                                                                     3660
ttccaactgt cctcagaagc tcaacccacc ttcaatttac tcccacactg ttgcagagcc
                                                                     3720
catctgtctg ccccactagt catcaagagc taggcagcta gggcctttgc ctcctgggaq
                                                                     3780
ctggtgccca gtatgcaatc aaaaagtgtt tgatgaaata aacaaaggaa acaaacttag
                                                                     3840
accatattca caagcctctc cagaggcaat tcatgccaag actcctgggt caggatagag
                                                                     3900
agctggctct aaagggaaat gaggaggtgc tggggaggcc ctgagctctg gaaggtaatg
                                                                     3960
tgtgggagga gaagcccacg gtcccagaca gggcccactg gggcagagtt ccaggctgtg
                                                                     4020
cetgeggeeg acceaggeee getteetetg gatteteete acceteeegg acacaaggag
                                                                     4080
caaacgggcc tcattccttt ttctccccac atccatcgct tcttgcaaaa ggaaagaaca
                                                                     4140
gaacaggaaa tgcattcgcc agagtgctcc ctgggtggac gagaggaaac agcgagtatg
                                                                     4200
getteacece gecacececg eccetgeagt ttetgggeag ggeceagggg eccaggece
                                                                     4260
getgetgetg geettacgtt geagagggag tgtgteeggt gtegagggga gttgatgteg
                                                                    -4320
ctcggtgtgg acgaccggtc gccttcggcg gcagatgcgt cggagatgac agagggctgc
                                                                     4380
cgggagtggc aggggtcac cctgaccgct tgccggtccg cagggtgagg ggggtgtgag
                                                                     4440
tggtagagag tetgttgaet etgeeggatg getgeggtea gegggaggte egeetgeace
                                                                     4500
acceactect ggttgccatt gagcaccgte tegeceggea tggcgaggga atgeegettg
                                                                     4560
gggacgteet tggteagegt agetaaggae tgtttggeea tggeeagete ggeeteeage
                                                                     4620
tectteatee ggttgteett gaggteeage tgggagegea gtgeegtgge gtggtetgtg .
                                                                     4680
```

```
geotecttgg cttggegeeg cageteceae tteteaeget ccageaggte etteteettg
                                                                     4740
gecagegett tgacegeate etegetetee ttgeggtget geteatagtt geggatgaag
                                                                     4800
teteggaget geteetegeg geteteeagt gtggeataca getgetgeat etggeteace
                                                                     4860
aggicitate telegecett taagegette egateagett teatggeetg caaggettet
                                                                     4920
ttggctctgg ctagctcctg ctccttctgg gccagctgga ccctgagctc ggtggccgag
                                                                     4980
aggaceteag aggacetegee geeetgegae teeteeaggt cettegeeaa cateteette
                                                                     5040
atetgeegga gaaggtgaac tteeteetgg ageeggaca ettetteeeg eaggageaet
                                                                     5100
tgegetecaa getgggggtt etecatgtte gtegeegeeg agteeeeege egeegaggeg
                                                                     5160
etggeegegg etecegggee egggeegggg eegeegeege egeteagtte egeeagtete
                                                                     5220
eggttggtgg cegtgagtte ggetegeagg ttggteacet cetggetgge egactggace
                                                                     5280
geceeatega tgeggagege gagetgetta ttgtetteea teatgeteag gattttggee
                                                                     5340
tgggggcgag agaggtgaca aagagctgca tgatgcgcgg ggggcgcgcg gccgggcacc
                                                                     5400
cceggeteta cetgttgtgt ceteegegge ceggettege eegegeeeeg acceeeagge
                                                                     5460
accggcagcg ccggttcctc cggcacagga atgacagcgg cgcctccagc cctagccgcg
                                                                     5520
gcggtggcga ggcggcgggg ggaggaggcg gaggagaaaa aagaggagga gaaggaggag
                                                                     5580
gaggagcagc gatcgccgag accccggcgg gcgggcgc
                                                                     5618
```

```
<210> 5107
<211> 2291
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (308)...(1609)
<223> similar to gi3043632 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5107
cccacgcgtc cgataaaaaa tgtttgtcat ctactattca agacaatcat tatttttctg
                                                                       60
gaaattgtat ctgttttcaa ggttatatgt aaagtgttaa gacaatatcc tataaaatgc
                                                                      120
atttttagga agttttgcat tactttcttc ctaagtcttg gtaaagttat ataattagta
                                                                      180
ccttgaaaaa aataaagtga aaagcctttt ggggacttta gactttagtg tttaaatgta
                                                                      240
attattttta tttgtttttg gtttattttt tatttttatt tttttttggcc gtggttataa
                                                                      300
tetteageat etgeaagaag gacgaaaage teaacaatat ettgacatgt getggaaaca
                                                                      360
gatggataat agtaaaaaga agtttgaaag agaatgtaga gaggcagaaa aggcacaaca
                                                                      420
gagttatgaa agattggata atgatactaa tgcaaccaag gcagatgttg aaaaggccaa
                                                                      480
acagcagttg aatctgcgta cgcatatggc cgatgaaaat aaaaatgaat atgctgcaca
                                                                      540
attacaaaac tttaatggag aacaacataa acatttttat gtagtgattc ctcagattta
                                                                      600
caagcaacta caagaaatgg acgaacgaag gactattaaa ctcagtgagt gttacagagg
                                                                      660
atttgctgac tcagaacgca aagttattcc catcatttca aaatgtttgg aaggaatgat
                                                                      720
tettgeagea aaateagttg atgaaagaag agaeteteaa atggtggtag aeteetteaa
                                                                      780
atctggtttt gaacctccag gagactttcc atttgaagat tacagtcaac atatatatag
                                                                      840
aaccatttct gatgggacta tcagtgcatc caaacaggag agtgggaaga tggatgccaa
                                                                      900
aaccacagta ggaaaggcca agggcaaatt gtggctcttt ggaaagaagc caaagggccc
                                                                      960
agcactagaa gatttcagtc atctgccacc agaacagaga cgtaaaaaac tacagcagcg
                                                                     1020
cattgatgaa cttaacagag aactacagaa agaatcagac caaaaagatg cactcaacaa
                                                                     1080
aatgaaagat gtatatgaga agaatccaca aatgggggat ccagggagtt tgcagcctaa
                                                                     1140
attagcagag accatgaata acattgaccg cctacgaatg gaaatccata agaatgaggc
                                                                     1200
ttggctctct gaagtcgaag gcaaaacagg tgggagagga gacagaagac atagcagtga
                                                                     1260
```

```
cataaatcat cttgtaacac agggacgaga aagtcctgag ggaaqttaca ctgatgatgc
aaaccaggaa gtccgtgggc caccccagca gcatggtcac cacaatgagt ttgatgatga
                                                                    1380
atttgaggat gatgateeet tgeetgetat tggacactge aaagetatet accettttga
                                                                     1440
                                                                     1500
togacataat gaaggtacto tagcaatgaa agaaggtgaa qttototaca ttatagagga
ggacaaaggt gacggatgga caagagctcg gagacagaac ggtgaagaag gctacgttcc
                                                                     1560
cacgicatac atagatgiaa cictagagaa aaacagiaaa ggitccigaa gagggittci
                                                                     1620
gaggaaatgg gcaagatgtt gaaggaggtt acatgcagct gcttttgggg gagggtatta
                                                                     1680
gagttgtcag gctcaaagag agtgagagaa gcaagttgca tgagtgcatg cagacatgat
                                                                     1740
                                                                    1800
ttttttttta ctaacttcat tagcatttcc atacattgtt tttaaaaatc ataataccaa
cccttaagtt cctagttcac agttattccc acaaaagaaa aagccaacaa tagtgtacca
                                                                     1860
tttttctatt ttattttatt gctgtctaat caataaagaa tgcagagctg tcaaaaaatg
                                                                    1920
tgtcttacat ttagctgtcc caacagggat tgtcttccct cccagctctg gttttaattg
                                                                    1980
gettttagac ceactatetg teagateett geeatetgte agtgtetgee tgegedacet
                                                                    2040
ccgtgcttgc ctaacatcct gttgcatgtc tagcgtgatt gagctagatt tttcaggcat
                                                                    2100
gtctttagat tecettgtte ttgtcaaage ettgttttgt tttacatttg tagtgcaaat
                                                                    2160
cactttgtca aacatctcca gcactaatgt ttccatctta gtatttgtgc acactgctat
                                                                    2220
aacttcccca ctgcaaacat tccagttttg gcattacgaa gaagtagctg tgaacctgaa
                                                                     2280
gtatttatga t
                                                                    2291
```

```
<210> 5108
<211> 613
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (616)...(321)
<223> similar to gi4008577 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5108
ttttttaaa aaaataaata catgtttatt taaaaaagaa aaagaaaaac cctaccaaga
                                                                       60
acaaaccetg gtcaatgaga aatcaatget teetetgaaa gecageaaca geeggtgetg
                                                                      120
tcaacacccc aagaagtaca ggtacctcag tccaaacatc aggtctcgaa tattcttctg
                                                                      180
tggtcaaaac tggcattcaa caggttgctg gtctgtgtgg gctccaatta ttaqcacaqa
                                                                      240
caactitac cactigatat etegetigeet atgeceacta ceacageeca gecaceecea
                                                                      300
cagecteagg aaagttacat atceteaaca etecattigt aggeaagtte etecaetgee
                                                                    √ 360
ttcttgctgg caagcctggc aaagcgcttc tgttcaaatc cattggatct gtccactccg
                                                                      420
teccagegat atecaggeea gatattaaat etgttgggag gaggtgetgg accaetgtag
                                                                      480
egaggtetea ettitttatt ettgitetee tiggeettat tettetigat gaagtiggee
                                                                      540
atagggtece cetetette etgttetett ageateetat ecagatette gteateaata
                                                                      600
tagegggeea gag
                                                                      613
```

```
<210> 5109
<211> 2423
<212> DNA
```

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2424)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2173)...(1415)
<223> similar to gi4235226 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5109

```
tttttttttt ttgagagaat tcataaatat tagttaagga tctaaaacaa acttctcaaa
                                                                       60
taactgaaag ctgaaageet etggaageea actgteeetg cacaaaggtt tacaattgag
                                                                      120
aaatatetee titteetatt tigicaagit teittaatig etgaacagaa agaagettea
                                                                      180
agtaatggag aaggcattgt ctgagtgcag ctgctttcct gggacgcctg tgccgttcct
                                                                      240
gtettecaaa teetatgett gggaggeeee tgggaggtae atttttgeea gggaaceaae
                                                                      300
ctgaccttaa aaagatgagt gtgacacagc cggctgggca ggaggatgga ggttgccaca
                                                                      360
gggacaccac ctggcccacg ccctgggnca gcctgggcat gttttgccga gttcggggga
                                                                      420
gggccacccc acccagaggg cacagggcaa accctaagca cgggggtatt gcccttgaag
                                                                      480
ecceagggga tgeectgtge eggateetea tgeeteattg actageetge ttgetgaagg
                                                                      540
agcccagggg cctgagcctg caacactgca aggggtgaga agggcatgct gctgtgggcg
                                                                      600
                                                                      660
cactggactc aaacctcaca ttagaagcta caaagaaccc caaatgcgct tcagagcccc
accaaccccc aagccagget catecetgae acagtgaate caetgcagee eeegtgggaa
                                                                      720
actotytyce aattyactyc ttaaagaact gygggaaata gaaagccgag aaagagctcc
                                                                      780
                                                                      840
gatacacaag ggaaaccgca cgtgagaacc agcactccca gcagggagac gtcactctcc
agaggecaca gagatggeag acacetetgt etecacaatg acceeacate enaactgaaa
                                                                      900
gtgtgcagga agacaggtct attgacactg aaatctagaa atcaaggtcc acaggcgaat
                                                                      960
ggaggcatct tcagccctga ggaggccagg ctgtgtctcc tgacgcccct gagggtgggc
                                                                     1020
acagcageca getetgtgtg ggeggagtee acgtggteet cattetette cetggggaca
                                                                     1080
gggcagcaca gtcagatgct gagactgagg ccacacacat gggggcgcct tcctgccttg
                                                                     1140
geceggeeca getgeetetg gagecaggag geegtggeag ceacaceaea gtgtggatee
                                                                     1200
agacacgatt ctgtggaggg gttccgggat tccagacaga ctgaatctcc atggaatgat
                                                                     1260
gaaaattaaa atttacttga ttatggaagt etetgattta ttecageeaa aatattagat.
                                                                     1320
gagecactga gaateaceae adageaateg eestedegge eettgeedgg gtgaeggede
                                                                     1380
ageaggagga caggtgccca ggccagtggt tctagctctt cacctctgcg acctccttct
                                                                     1440
etgeettete titiggeette teetteteet eeacettete etetititee agtgitgeta
                                                                     1500
caatctcagc cacctggctg gtggagatgt gaacatcttc tttgtccacc agctcaatca
                                                                     1560
cettgacgag gtcgtcgatg ttgacettge catcettgtt ttcatecagt getgeggeca
                                                                     1620
ggctggtgag cttgctttcg ggaatgtgct tgacttgctt catggcgttg atgagctcag
                                                                     1680
cgacactgat gacgttetec eccgtgggca tgecgttggc eggggecage ttgecagect
                                                                     1740
getggtecat etccagetge gagateaage categatetg eccgateatt tgetgeacee
                                                                     1800
tttttgtcaa totottgctg gotttägatt ottocaogta tttttottca coagtotttg:
                                                                     1860
aaagtteett ettgatetee tgeaagteet egetgtagte etgeaeatee teetteagea
                                                                     1920
getecagete etecttetee ttggtgagtg acttettetg etectgeage ttagageagg
                                                                     1980
categorgag gargregatt tecteetreg tgaretetre etectreaag ceetecagea
                                                                     2040
ccggggcagt gtccttcaag gtctctgact gcaggactgt gtcaggcatt tctggctgtg
                                                                     2100
geteggteee eggeetttgg ggageageta eeacaegtte gggeteaaaa teettetgaa
                                                                     2160
aggcaaggcg acaccagece agegeeegee ateacacaga ageagtette ttgeteeeeg
                                                                     2220
aagctcagaa catatggcag aggccacact gggagcaggc ctgcaggtga cattgggcag
                                                                     2280
cacacetgee acagaaggte cetagggagg etceatgeag etgecaggte acetggggee
                                                                     2340
etetecagaa caggetagag cacettatee atetetggte tececaagae tececcaage
                                                                     2400
```

```
<210> 5110
<211> 2266
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(884)
<223> similar to gi5813803 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5110 atggagtate eegegeegge caeggtgeag geegeggaeg geggagegge egggeettae 60 agcagetegg agttgetgga gggccaggag ceggaegggg tgegetttga cegegagagg 120 gegegeegee tgtgggaage egtgteeggt geceageegg tgggtagaga ggaagtggag 180 cacatgatec agaagaacca atgtetette accaacacce agtgtaaggt ttgctgcgcc 240 ttgcttattt ctgagtccca gaagctggca cattaccaga gcaaaaaaca tgccaacaaa 300 gtgaagagat acctagcaat ccatggaatg gagacattaa agggggaaac gaagaagcta 360 420 gactcagatc agaagagcag cagaagcaaa gacaagaacc agtgctgccc catctgtaac atgacetttt ceteceetgt egtggeeeag tegeactace tgggggaagae ceaegeaaag 480 aacttaaagc tgaagcagca gtccactaag gtggaagcct tgcaccagaa tagagagatg 540 atagacccag acaagttctg cagcctctgc catgcaactt tcaacgaccc tgtcatggct 600 caacaacatt atgtgggcaa gaaacacaga aaacaggaga ccaagctcaa actaatggca 660 cgctatgggc ggctggcgga ccctgctgtc actgactttc cagctggaaa gggctacccc 720 tgcaaaacat gtaagatagt gctgaactcc atagaacagt accaagctca tgtcagcggc 780· ttcaaacaca agaaccagtc accaaaaaca gtggcatcat ccctgggcca gattccaatg 840 caaaggcaac ccattcagaa agactcaacc accttggaag actagaggtg attctgccca 900 960 geateceata ttgggeeage catgageeag etteeegtga etgeteagee ettggeteee tettgetegt tgtteteace aggaaagtae aegggeetga ggeaggattg ggeeacagae 1020 agecteteat tggteeggge taatteaete etgetgetee eetttggeag gggteetgta 1080 ggtcatgaca ggggaggcaa gggtattgag agactcgggg tctcgcgggg tggtagtttg 1140 gagggtgget ttecceattt eccaaceeet etgggeetta ggtgetgagg eccetgeeae 1200 etgtetttee tetaaaggte agttttggge cagttettge aactaaagag cagagatete 1260 tetgggeeet agacatttee agcaaaacet ggaactttea tgecaaacet ggggeaggge 1320 aggaaacaga ggaaatggct gcaacatggg agcttggagc taatacgaca ctctgccttc 1380 ccccagaagg tgcaggcttt cctgagtctt agaccagata tggccagttg cgcaggtttc 1440 tgccaactgt gaagtateet cetggageag tgacacaate ttggeggage attgetacee 1500 cegetgeece etecacagtt cetgaatggt getaaggate tgeageagtt ggeaacgage 1560 tggggctggg ggcggcctcc atgtccactg agatcatagg acactccaat ggggatggga 1620 cetttecect cetecateag aggtgetetg accetaggtt acaegggaaa gtgeeceaca 1680 tgcaagtete cetgagggtt etgecectaa aggeagactg ceteatgeee getagetgtg 1,740 aggtteattg etaccetegg ceetactage cetetettee ceettgtgea geggaecaet 1800 tgcccagttt gctgtggtgc tagccttccc catcatccac cgggtgattt ctgggtccca 1860 gggaaagaaa gagagagetg atgeaggttt etacagtgag gaacaggegt tteecaggee 1920 ccacaccag attictctat ctitgctgtg tittatggcc tgggactgag tccacacgga 1980 tagatttttc cttgtaacct tgagacgaga attccaagga gtgtcaccat cagaggettc 2040 tetteattgt gteaaagaag eecetagetg etetegtgge eteetteeee eacteeetat 2100 ecetteacet gtgaaatgee tttgetttge atattgtgtg tggatgtgtg tgtgtgtgtg 2160

```
2220
```

```
<210> 5111
<211> 1041
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (122)...(539)
<223> similar to gi2832266 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

<400> 5111 cactaacctg cccctactgc tggagctgcc cacacggtgg tccccgacct tgggcccaga 60 ccggcacggg gctccggaaa aactgcttgg ggctgagcgg atgccccgag ccccqqqcqq 120 ctttgagtgc ttccactgcc acaaacccta ccacacgctg gccgggctgg ccaggcaccg 180 geagetgeae tgecaectge agggggggeg tgtetteaec tgeaagtaet gegaeaagga 240 gtacaccage etgggtgece teaagatgea cateegeact cacaegetge cetgeacetg 300 caagatetgt ggcaaggeet tetecaggee etggttactg cagggeeatg tecgcaceca 360 cacaggggag aagccctatg cetgetegea etgeageagg geetttgeeg aeegeteeaa 420 cettegggee catetgeaaa egeacteaga egecaagaag taceggtgee ggegetgeae 480 caagacette teeegeatgt eesteetgge geggeatgag gagtetgget getgeeeggg 540 cccctgagag gcacgtggtc ggcgcaggta ggagggatgg tcctcaccgg gagagctggc 600 gtccctcctg cccccagagg agccaggagt ctgggagggc ggggcctggc ctcacacttg 660 gtgcgtcctc cacatctgcg tccaatcaga accaaagaag tccagcgggg gccactgggc 720 eggaggacae teccecagge ateccacege geggageeca etcagaggag actectetee 780 eggggaagge titeateaga acaagageea tggtteeatt tegacaegge caggteteeg 840 gggctaccct tccaagagtc agagcctcgg ggaggtggcc gccagcatgg gccggcactg 900 ccgccggatg gctggcaagg ctgcctagtt cccttgcagc agaaatgaac agttctgact 960 tatagtgage aeggeeetgt ggeeetteet eagtaggeae aactacetet eageeageee 1020 ccgccagcct ttggtttggg g-1041

```
<210> 5112
<211> 1698
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1699)
<223> n = a,t,c or g
<220>
<221> misc feature
```

<222> (1)...(1090)
<223> similar to gi2589009 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

```
<400> 5112
taccetecaa atagcaaatg tacttggaaa atcacagtte eegaaggaaa agtagtegtt
                                                                       60
ctcaatttcc gattcataga cctcgagagt gacaacctgt gccgctatga ctttgtggat
                                                                      120
gtgtacaatg gccatgccaa tggccagcgc attggccgct tctgtggcac tttccggcct
                                                                      180
ggagcccttg tgtccagtgg caacaagatg atggtgcaga tgatttctga tgccaacaca
                                                                      240
gctggcaatg gcttcatggc catgttctcc gctgctgaac caaacgaaag aggggatcag
                                                                      300
tattgtggag gactccttga cagaccttcc ggctctttta aaacccccaa ctggccagac
                                                                      360
egggattace etgeaggagt caettgtgtg tggeacattg tageeceaaa gaateagett
                                                                      420
atagaattaa agtttgagaa gtttgatgtg gagcgagata actactgccg atatgattat
                                                                      480
gtggctgtgt ttaatggcgg ggaagtcaac gatgctagaa gaattggaaa gtattggtgt
                                                                      540
gatagtecae etgegeeaat tgtgtetgag agaaatgaae ttettattea gtttttatea
                                                                      600
gacttaagtt taactgcaga tgggtttatt ggtcactaca tattcaggcc aaaaaaactg
                                                                      660
cctacaacta cagaacagcc tgtcaccacc acattccctg taaccacggg tttaaaaccc
                                                                      720
accettgect tetetcaaca aaagtetaga cegacegega ctctgeageg caattattet
                                                                      780
tcaagtgact ttgtattagc cggcactgtt atcacaacca tcactcgcga tgggagtttg
                                                                      840
cacgccacag tetegateat caacatetae aaagagggaa atttggcgat teagcaggeg
                                                                      900
ggcaagaaca tgagtgccag gctgactgtc gtctgcaagc agtgccctct cctcaqaaqa
                                                                      960
ggtctaaatt acattattat gggccaagta ggtgaagatg ggcgaggcaa aatcatgcca
                                                                     1020
aacagcttta tcatgatgtt caagaccaag aatcagaagc tcctggatgc cttaaaaaat
                                                                     1080
aagcaatgtt aacagtgaac tgtgtccatt taagctgtat tctgccattg cctttgaaag
atctatgttc tctcagtaga aaaaaaaata cttataaaat tacatattct gaaagaqqat
                                                                     1200
tccgaaagat gggactggtt gactcttcac atgatggagg tatgaggcct ccgagatagc
                                                                     1260
tgagggaagt tetttgeetg etgteagagg ageagetate tgattggaaa eetgeegaet
                                                                     1320
tagtgcggtg ataggaagct aaaagtgtca agcgttgaca gcttggaagc gtttatttat
                                                                     1380
acatetetgt aaaaggatat tttagaattg agttgtgtga agatgteaaa aaaagatttt
                                                                     1440
agaagtgcaa tatttatagt gttatttgtt tcaccttcaa gcctttgccc tgaggtgtta
                                                                     1500
caatcttgtc ttgcgttttc taaatcaatg cttaataaaa tatttttaaa ggnnnnnnnn
                                                                     1560
nnnnnnnnn nnngggggg ccgttttaaa gaatccttgg gggggccaaa gtttacgcgg
                                                                     1620
gcttgcaacg gaatagtttt ttccttatag ggggcggtat tataacctac ctgggaattt
                                                                     1680
ttggaaagga cctttact
                                                                     1698
```

```
<211> 2185
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2011)...(1170)
<223> similar to gi1572802 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<210> 5113

```
60
ttttttttt ttgagtttcc aaaattagaa tttatttcag tttctaagga atgaatcccc
gagtgtggca ggaaggacac agccggctcc tgacgcacac ctgatttgat tcaacaccga
                                                                    120
gteggcacag acacaaccag agatggcctg ggtccaggct ggggctgcac gggctgtgtc
                                                                    180
ctggacagcc aggagggagg ccccgcacac agacggccgc cgggcagggg gcctgagcgg
                                                                    240
gacaggcctg gccacagccc atgtccttgg ccttccacat aggtgcacac attgtctgcc
                                                                    300
cagagaggc caagatgccc caggcacccc ttcgctccgg gggctcagga cacaggctcc
                                                                    360
cagctgaggc cacgcctgga cccagagctg atgtttggct gcacgcgagc ccactcggga
                                                                    420
cagacccaag aacacgaatt ctgtcccttt ggatttaagg ctggtgtttt ttgacattta
                                                                    480
cttcagtttt tctctctgaa attaaaatta cctgagtaaa agattttaag acattaaaaa
                                                                    540
agccaaaaac acagaatccc tgcaggcaga cggtgccagg gaggtggcgg ccagggccag
                                                                    600
gatgccaggg gcacggtggg gtcggctgga gctccagggc tgggcctttc ccagtctcgc
                                                                    660
ctgccctgga gcccccagga gccgcccctg ggccgacgct cctgtggccg gagcacagga
                                                                    720
aggcacagtg aggtagggac agtggccatt gtcccccgcc tgccaccagg gctgagaggg
                                                                    780
cagegeaege cteggeeect cetataagee cetgeeecet eggagetggg tgtettgtee
                                                                    840.
900
cagacagtta aataatcctt tatttgggtg ggctggggga ggggtgactg gcccaggagg \
                                                                    960
gcaggcgagg ccgggcccag acccccatgg ggggtggcag gggcctcggg cgggctagga
                                                                   1020
tgcacctggc acccagaagt gccgcggggg cactggctcc tcaggggccc gagcgggcgg
                                                                   1080
ggagcagtet cetacttgtg cegggeeteg gteaceetet geaggeagta etgegeggeg
                                                                   1140
ggcagcgaca ggaccaggct cgcggtgcgg cggcccatcc agtacaggct gtagcccagc
                                                                   1200
aggeegaaga aggeggeett caeggeeaac egagacaete tgeeggagae ggaeggeggg
                                                                   1260
ggcacggtca tgatctcctg gatgttgagg tcggtgctcc agttcttctc gatgccaggc
                                                                   1320
acgtggccca tgcccacgac gcccacgacc acggagggga cgcacttcct gggctcggcg
                                                                   1380
teagaggeee gaggeagete gaggegeege geggeetgge geageatgta ggttaggtag
                                                                   1440
acgicgcgct ccgagacgat ggigcggigc aggictggga actcgccaat caictcggcc
                                                                   1500
atcatctgct ccagtaggtc cttctgcttg cagcgttcca cgtcatcctt gctgatgggg
                                                                   1560
tetgacagga ageacaggee ecaagecage etgacettet gecagaagga gagegetgeg
                                                                   1620
atggccctct tgaaggtgac ggggatgggt cggtcaccca ggtggaactt gcagaaaggc
                                                                   1680
acettgetgg ceteettgaa ggeeteeetg aactegeeae etggggeeat geeeagetge
                                                                   1740
teggtgatgt gtgcagacac etteageage ageatetgea teageeeega catgageeeg
                                                                   1800
ttetgeetea eggeetgetg eagettetee aggetgaget cetgggeete eegeageage
                                                                   1860
gtgetetegt ceatetteag catggaeaca egatattgge agagetecae gaceaecaeg
                                                                   1920
teaggetgea ceteceggat ggtetteaca aegtecetet tgetgtegte getgaagtgg
                                                                   1980
getgteecea ceaegtaeae cetgeteeeg teeteageea ceaaetgggt cacagtgege
                                                                   2040
ggcaggttgg gccgctgacg ccgccgcttc agcttcatct ccaggagcag gttgaaggcg
                                                                   2100
tccacgtcgg acaggttctg ggggtctcca gaaagcaccc tgggcaccgg ctctgaagcc
                                                                   2160
acgaaatcgt cgacccggga attcc
                                                                   2185
```

```
<210> 5114
<211> 411
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(315)
<223> similar to gi5103027 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
ccccggccac ctaccacca ctccactca acctccaage ccacctggge cagetttece 60 cgctcctga gcacctgge ttcgacgcc tggatcaact gagccaggtg gaactcctgg 120 gggacatgga tcgcaatgaa ttcgaccagt atttgaacac tcctggccac ccagactccg 180 ccacagggge catggccct agtgggcatg ttccggtcte ccaggtgaca ccaacgggte catacacagac cagectcate tccgtcctgg ctgatgccac ggccacgtac tacaacagct 300 acagtgtgte atagagctgg aggcgcccg tccggtcage cctcgcgcc tctccttcct 360 gtgccttgag tggcagagga gccgtccage cacaccaget ttcctccac c 411
```

```
<210> 5115
<211> 2065
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (685)...(959)
<223> similar to gi3875176 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5115 cggacgcgtg ggctcgcgta gccgtgcgcc gattgcctct cggcctgggc aatggtcccg 60 gctgccggtc gacgaccgcc ccgcgtcatg cggctcctcg gctggtggca agtattgctg 120 tgggtgctgg gacttcccgt ccgcggcgtg gaggttgcag aggaaagtgg tcgcttatgg 180 teagaggage agectgetea eceteteeag gtgggggetg tgtacetggg tgaggaggag 240 ctcctgcatg acccgatggg ccaggacagg gcagcagaag aggccaatgc ggtgctgggg 300 ctggacaccc aaggcgatca catggtgatg ctgtctgtga ttcctgggga agctgaggac 360 aaagtgagtt cagagcctag cggcgtcacc tgtggtgctg gaggagcgga ggactcaagg 420 tgcaacgtcc gagagagcct tttctctctg gatggcgctg gagcacactt ccctgacaga 480 gaagaggagt attacacaga gccagaagtg gcggaatctg acgcagcccc gacagaggac 540 tccaataaca ctgaaagtct gaaatcccca aaggtgaact gtgaggagag aaacattaca 600 ggattagaaa atttcactct gaaaatttta aatatgtcac aggaccttat ggattttctg 660 aacccaaacg gtagtgactg tactctagtc ctgttttaca ccccgtggtg ccgcttttct 720 gccagtttgg cccctcactt taactctctg ccccgggcat ttccagctct tcactttttg 7.80 gcactggatg catctcagca cagcagcett tetaccaggt ttggcaccgt agetgtteet 840 aatattttat tatttcaagg agctaaacca atggccagat ttaatcatac agatcgaaca 900 ctggaaacac tgaaaatctt catttttaat cagacaggta tagaagccaa gaagaatgtg 960 gtggtaactc aagccgacca aataggccct cttcccagca ctttgataaa aagtgtggac 1020 tggttgcttg tattttcctt attcttttta attagtttta ttatgtatgc taccattcga 1080 actgagagta ttcggtggct aattccagga caagagcagg aacatgtgga gtagtgatgg 1140 tctgaaagaa gttggaaaga ggaacttcaa tccttcgttt cagaaattag tgctacagtt 1200 tcatacattt tctccagtga cgtgttgact tgaaacttca ggcagattaa aagaatcatt 1260 tgttgaacaa ctgaatgtat aaaaaaatta taaactggtg ttttaactag tattgcaata 1320 agcaaatgca aaaatattca atagatgcac tattettgtt tttactgcat gaacgtaatc 1380 cagtatttgg aaagtaatcc agtttgaaat gtgaagatgt attccggcag aatagtgagt 1440 agaatgacat gcttactata cagaaggcaa aaataggact ctcaggtaat agtttaagga 1500 aaccettgat teettatata tgtttaagaa ggttagtttt etgtttettt geagttttte 1560 ttctagagtc catagcagga aagtatgtaa ccagaattgg ttagtgtgac cccctcaagt 1620 agcaagtgat ggaaaataag agtcaaatac cttgatgttt gtgatctcta actcaaaaaa 1680 tttgaagtgt tttaagttgt ttctgggtaa gggagatgtt aggagaaagg aaatgctgta 1740 actaaagctc aattattatc agttctatgc taacgtatac attttaatca tagttaccta 1800

```
agcagcatgc attaattgaa cettaaaatg tteccaetge geetggeeta aacaaaettt 1860 ttgaaaaget gtttetaaaa gatteettaa atteagatat gacagetaat taceteatea 1920 taaattaett ttatactaat tgtttecagg gttttagagt agttgaatgt ttattteaca 1980 aggeaceeta aattetatag aaataaaace teagatgagt eteettetta gagtgttaca 2040 atgaatggga gtttacaett ttatg 2065
```

```
<210> 5116
<211> 2276
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (271)...(492)
<223> similar to gi3877645 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5116 gaagagtgtg cgccaggggg ctgcctgatg gagctatgca tccagctcag catcgtcatg 60 ctggggaaac agctgatcca gaacaacctg ttcgagatcg gcatcccgaa gatgaagaag 120 ctcatccgct acctgaagct gaagcagcag agcccccctg accactagga gtgtgtgaag 180 aggaaacage ggtacgaggt ggattacaac ctggagecet tegegggeet caceceagag 240 tacatggaga tgatcatcca gtttggcttc gtcaccctgt ttgtcgcctc cttccccctg . 300 geoceactgt ttgegetget gaacaacate ategagatee geetggacge caaaaagttt 360 gtcactgagc tccgaaggcc ggtagctgtc agagccaaag acatcggaat ctggtacaat 420 atcctcagag gcattgggaa gcttgctgtc atcatcaatg ccttcgtgat ctccttcacg 480 tetgaettea tecegegeet ggtgtaeete tacatgtaca gtaagaaegg gaecatgeae 540 gggttcgcaa ccacaccctc tcctccttca acgtcagtga cttccagaac ggcacggccc 600 ccaatgaccc cctggacctg ggctacgagg cgcagatctg cagggtataa agactaccga 660 gagccgccga ggccggaaaa caagtacgac atctccaagg acttctgggc cgtcctgtgc 720 atcoggotgg cagttgtgat ogtottocag aacctggtca tgttcatgag cgactttgtg 780 gactgggtca teceggacat ecceaaggae ateagecage agatecaeaa ggagaaggtg 840 ctcatggtgg agctgttcat gcgggaggag caagacaagc agcagctgct ggaaacctgg 900 atggagaagg ageggeagaa ggaegageeg cegtgeaace accacaacae caaageetge 960 ccagacagee teggéageee ageceecage catgeetace aegggggegt detgtageta 1020 tgccagcggg gctgggcagg ccagccgggc atcctgaccg atgggcaccc tctcccaggg 1080 caggeggett ecegeteeca ecagggeeeg gtgggteetg ggttttetge aaacatggag 1140 gaccacttte tgataggaca tttteettte ttetttetgt tttettteee ttgtttttge 1200 acaaagccat tatgcaggga atatttttta atctgtagta ttcaagatga atcaaaatga 1260 tggctggtaa tacggcaata aggtagcaaa ggcaggtgct ttgcagaaag aatgcttgga 1320 aacttgagtc tccctagagg tgaaaagtga gcagaggccc ctagaaaccc tcctctgaat 1380 cetectaatt eettaagata gatgeaaaat ggtaageega ggeategege aaaagetggt 1440 gcgatgcttc agggaaaatg gaaaacccac gcaagaataa tgattgattc cggttccaaa 1500 aggigicace taccigitte agaaaagtia gactitecat egectitiee ticcateagt 1560 tgagtggctg agagagaagt gcctcatccc tgagccacac agggggcgtg ggagcatccc 1620 agttatecet ggaaagetag aaggggacag aggtgteeet gattaageag gaaacageae 1680 ccttggcgtc cccagcaggc tccccactgt cagccacaca cctgccccca tcacaccaag 1740 ccgacctcag agttgttcat cttccttatg ggacaaaacc ggttgaccag aaaatgggca 1800 gagagagatg accteggaag catttecaca gatggtgtea gggttteaag aagtettatg 1860 gcttccaggg gtcccctgga agctttagaa tatttatggg ttttttttt caaatatcaa 1920

```
ttatatggta gattgaggat ttttttctg tagctcaaag gtggagggag tttattagtt 1980 aaccaaatat cgttgagagg aatttaaaat actgttacta cccaaagatt tttattaata 2040 aaggcttata ttttggtaac acttctctat atttttactc acaggaatgt cactgttgga 2100 caattattt aaaagtgtat aaaaccaagt ctcataaatg atatgagtga tctaaatttg 2160 cagcaatgat actaaacaac tctctgaaat ttctcaagca ccaagagaaa catcattta 2220 gcaaaggcca ggaggaaaaa tagaaataaa tttgtcttga agatctcaaa aaaaaa 2276
```

```
<210> 5117
<211> 1547
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1489)...(974)
<223> similar to gi2842518 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5117 ttttttttt tggattttt tgtgctttaa tgttcgcagt cacacgaaag tggcatctcc 60 atcagcactg gggcggccgg cctcctcatc agccgacage ttgcacggtc cccgcctctc 120 atccatttgg tetgtttgca agttactaga teatacaaaa ataacegeta caaattetet 180 gtatetggea tataaaaact gageaaaaag tatetettaa ageaaaacat eteagaaaaa 240 atacaacaca ggtttaactt ctgcagtact ttgttcatat aaaacactag taaaataggc 300 ttcttaaaaa ttaaatagtg aaataccaac caaattatat acattgttac agtacaagtg 360 aatgaggcaa aatatccagt tcttagtttc ccaggtgggg gggggtggcc ttcagtgcgt 420 ggcacggagg gggtgacagg aaggccacgt tccgatgtca cagtcagcgc agaaagaggc 480 ttgcagcggg acaaacagat ggaaagaact gagtcacaca gggaagacca ggggctcctt 540 tgaggaagag tgaggtcatg tttttattgc ttgctaatcc gaggttttcc ctggcccgat 600 geceetetag gtageetgga teecaaatge tgeageecae gtagegetaa teeatgteae 660 caagcagcca cggggaagcc acagctgctc cagagaagac agaactaggc ttcagagccc 720 tcaatatctg agctggaccg atcctggtct ttcaggtcca tcagggtccc acatggtcca 780 actgacacac acgtttcccc gctgacggcc acgttcacct gagagcctga gggcgggcag 840 tgtgggctca tggcactggg atggtatcac tgtggcctgg ggggtggcac tcagacccag 900 ccaacccct cagcgaccac agtgcctcgc ccgcttctct gccgccacca gggctgaggg 960 tetaegtgeg gegeegettg geageactgg gaetggaagg gttgetgttt geggteagga 1020 etttgteggt gacceggetg egetteeget tgtetgegee ttetttgeae eccaagtetg aggagttett etetttgtet ttgetggatt tttetgatge ttteeceaaa etecetgaag 1140 atgaaaaaac atcgtcagcc ccattgtggg ggtccacgtc ttccttcatc tcctcttca 1200 tetectette tateateact titteettete ggaeeteetg aatgatetet tetggaagga 1260 cgaagtteet etetggatte gggaatggaa gaateteaga eteatgeage geetgeatgt 1320 cgtacatggt gctcagatgg tcccagatga ccttggatgg gacctgccgc ccgatgttct 1380 ggctgaactt gtcccgaata caaatcatgt ggaagtgtcg gttcacaccg acgggcttqt 1440 ggcccagcat ggcgtggaag aggcacacct ccacctcggg gctccacacc actgtctcct 1500 ccgccgggct ggtggccgcc tcccccgggc ccttgtcgct tgcggcg 1547

```
<210> 5118
<211> 863
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(864)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (10)...(654)
<221> misc_feature
<222> (10)...(654)
<221> misc_feature
<222> (10)...(654)
<223> similar to gi1825727 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

<4.00> 5118 ctggaagaag agcgggagtt ttataatgcc aggcgacggg agcatcgcca gaggaatgac 60 gttggtggtg gcggcagtga gtctcaggag ttggttcctc ggcctggtgg caacaacaaa 120 gaaaaagagg tgcccgctaa agaaaaacca agctttgaac tttctggggc acttcttgag 180 gacaccaaca ctttccgggg tgtagtcatt aaatatagtg agcccccaga agcacgtatc 240 cccaaaaaac ggtggcgtct ctacccattt aaaaatgatg aggtgcttcc agtcatgtac 300 atacategae agagtgegta detactgggt egacacegee geattgeaga catteeaatt 360 420 gatcacccgt cttgttcaaa gcagcatgcg gtctttcaat atcggcttgt ggaatatacc cgtgctgatg gcacagttgg ccgaagagtg aagccctaca tcattgacct tggctcaggc 480 aatggaacct tcttaaacaa caaacgtatt gagccacaga gatactatga actaaaagaa 540 600 aaggatgtac tcaaatttgg attcagtagc agagaatacg tcttgctcca tgagtcgncg gacacttctg aaatagacag gaaagatgac gaggatgagg aggaggagga agaagtgtct 660 gacagctagc aaactaagaa cccaaactat tgatacacgg tttccttctt ggaagtcttt 720 gattgactca gagagcacta tggtggtggg tecagcacta tggtgetete tgtaatgeet 780 cttactgcct taagtctttc ctctgttgct gaccagattg tgttaccatt tgaatacact 840 gactaatgta tgttaaactt tta 863

```
<210> 5119
<211> 930
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (12)...(204)
<223> similar to gi5107816 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5119
ggaattcccg ggtcgagggg gaccgccttg gggggctgtc catcagccca gcgggcatcg 60
tgaagcggga tgagctggtg ttccggatgg tccgtggccg ccgggtgccc atccttatgg 120
```

```
tgaceteagg egggtaceag aagegeacag eeegcateat tgetgactee ataettaate
                                                                      180
tgtttggcct ggggctcatt gggcctgagt cacccagcgt ctccgcacag aactcagaca
                                                                      240
caccgetget tecceetgea gtgeeetgae cettgetgee etgeetgtea egtggeeetg
                                                                      300
                                                                      360
cctatccgcc ccttagtgct ttttgttttc taacctcatg gggtggtgga ggcagccttc
agtgagcatg gaggggcagg gccatccctg gctggggcct ggagctggcc cttcctctac
                                                                      420
ttttccctgc tggaagccag aagggcttga ggcctctatg ggtgggggca gaaggcagag
                                                                      480
ectgtgteee agggggaeee acaegaagte accageeeat aggteeaggg aggeaggeag
                                                                      540
ttaactgaga attggagagg acaggctagg teccaggeac agegagggee etgggettgg
                                                                      600
ggtgttctgg ttttgagaac ggcagaccca ggtcggagtg aggaagcttc cacctccatc
                                                                      660
                                                                      720
ctgactagge etgeatecta actgggeete ecteeeteee ettggteatg ggatttgetg
ccctctttgc cccagagctg aagagctata ggcactggtg tggatggccc aggaggtgct
                                                                      780
ggagctaggt ctccaggtgg gcctggttcc caggcagcag gtgggaaccc tgggcctgga
                                                                      840
tgtgaggggc ggtcaggaag gggtacaggt gggttccctc atctggagtt cccctcaat
                                                                      900
aaagcaaggt ctggacctgc aaaaaaaaaa
                                                                      930
```

```
<210> 5120
<211> 2614
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(916)
<223> similar to gi3294180 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5120
ctgtgtggtt ttatgtaggc atggcaggtg ccttttgttt catcctcata caactagtct
                                                                       60
tacttattga ttttgcacat tcatggaatg aatcgtgggt tgaaaaaatg gaagaaggga
                                                                      120
actogagatg tiggtatgca gootigttat cagotacago totgaattat oigotigtott
                                                                      180
tagttgetat egteetgtte tttgtetaet acaeteatee ageeagttgt teagaaaaea
                                                                      240
aggegtteat cagtgteaac atgeteetet gegttggtge ttetgtaatg tetataetge
                                                                      300
caaaaatcca agaatcacaa ccaagatctg gtttgttaca gtcttcagta attacagtct
                                                                      360
acacaatgta tttgacatgg tcagctatga ccaatgaacc agaaacaaat tgcaacccaa
                                                                      420
gtctactaag cataattggc tacaatacaa caagcactgt cccaaaggaa gggcagtcag
                                                                     480
tccagtggtg gcatgctcaa ggaattatag gactaattct ctttttgttg tgtgtatttt
                                                                      540
attecageat cegtaettea aacaatagte aggttaataa aetgaeteta acaagtgatg
                                                                      600
aatctacatt aatagaagat ggtggagcta gaagtgatgg atcactggag gatggggacg
                                                                      660
atgttcaccg agctgtagat aatgaaaggg atggtgtcac ttacagttat teettettte
                                                                      720
actteatget ttteetgget teaetttata teatgatgae eettaeeaae tggtaeaggt
                                                                      780
atgaaccete tegtgagatg aaaagteagt ggacagetgt etgggtgaaa atetetteea
                                                                      840
gttggattgg catcgtgctg tatgtttgga cactcgtggc accacttgtt cttacaaatc
                                                                      900
gtgattttga ctgagtgaga cttctagcat gaaagtccca ctttgattat tgcttatttg
                                                                      960
aaaacagtat teccaacttt tgtaaagttg tgtatgtttt tgetteecat gtaacttete
                                                                     1020
cagtgttctg gcatgaatta gattttactg cttgtcattt tgttattttc ttaccaagtg
                                                                     1080
cattgatatg tgaagtagaa tgaattgcag aggaaagttt tatgaatatg gtgatgagtt
                                                                     1140
agtaaaagtg gccactattg ggcttattct ctgctctata gttgtgaaat gaagagtgaa
                                                                     1200
aacaaatttg tttgactatt ttaaaattat attagacctt aagctgtttt agcaagcatt
                                                                     1260
aaagcaaatg tatggctgcc ttttgaaata tttgatgtgt tgcctggcag gatactgcaa
                                                                     1320
agaacatggt ttattttaaa atttataaac aagtcactta aatgccagtt gtctgaaaaa
                                                                     1380
```

```
1440
tettataagg tittaceett gataeggaat ttacacaggt agggagtgit tagtggacaa
tagtgtaggt tatggatgga ggtgtcggta ctaaattgaa taacgagtaa ataatcttac
                                                                     1500
                                                                     1560
ttgggtagag atggcctttg ccaacaaagt gaactgtttt ggttgtttta aactcatgaa
gtatgggttc agtggaaatg tttggaactc tgaaggattt agacaaggtt ttgaaaagga
                                                                     1620
                                                                     1680
taatcatggg ttagaaggaa gtgtttgaaa gtcactttga aagttagttt tgggccagca
eggtagetea ecettgtaat eecageaett tgggaggetg aggtgggtag attaettgag
                                                                     1740
cccaggaatt caagaccagc ctgggcaaca tggtgaaacc ctgtttctat aaaaaataat
                                                                     1800
                                                                     1860
ctgggctttg tagcatatgc ctgtggtccc agctactgag gaggctgagg tgggaggatt
                                                                     1920
gettgagece aggaggeaga ggttgeagtg agecaaggte aegteactge aetetageet
gggcaacaga gtaagacaaa aaaatatata tatattgaaa atcaaaggag gcaaaatttt
                                                                     1980
gacagggaag gaagtaactg caaaacacta ggctttagta ggtacttata taaaatctag
                                                                     2040
tccagttctc tcatttaaaa aaatgaagac actgaagtac agacttaaat agctcagata
                                                                     2100
                                                                     2160
gctaattagg aaatttcaag ttggccaata atagcattct ctctgacatt taaaaataat
ttctattcaa aatacatgca taattgattt tacacctcat tactggtgga taatttatgt
                                                                     2220
                                                                     2280
gatgtggatt gctggtgtcc agcatgaccc ataaacaggt cagaagaatg atggaatgtt
ttagaataaa ctcctgctta tagtatacta cacagttcaa aagatgttta aaatgctttt
                                                                     2340
gtatttactg ccatgtaatt gaaatatata gattattgta acctttcaac ctgaaaatca
                                                                     2400
agcagtatga gagtttagtt atttgtatgt gtcactagtg tctaatgaag cttttaaaat
                                                                     2460
ctacaatttc ttctttaaaa atatttatta atgtgaatgg aatataacaa ttcagcttaa
                                                                     2520
ttccccaacc ttattctgtg tgtagacatt gtattccaca attttgaatg gctgtgtttt
                                                                     2580
acctctaaat aaatgaattc agagaaaaaa aaaa
                                                                     2614
```

```
<210> 5121
<211> 2945
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2188)...(471)

<223> similar to gi1519392 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5121
ttttttttt ttcctgcctg aatcagggag acccaggatg ctgttcaggc cttatcccaa
                                                                       60
ccaaattgtg tacccaacag ctcattgaga acaagccatg atgacaatgg cggttttgtc
                                                                      120
aaatagaaaa gggggaaatg tggggaaaag caagagagat cagattgtta ctgtgtctgt
                                                                      180
gtagaaagaa gtagacatag gagactccat tttgttctgt actaagaaaa attcttctgc
                                                                      240
cttgagattc tgttaatcta taaccttacc cccaaccccg tgctctctga aacatgtgct
                                                                      300
gtgtcaactc agagttaaat ggattaaggg cggtgcaaga tgtgctttgt taaacagatg
                                                                      360
cttgaaggca gcatgctcct tgagagtcat caccactccc taatctcaag tacccaggga
                                                                      420
cacaaaaact gcggaaggcc gcagggacct ctgcctagga aagccaggta ttgtccaagg
                                                                      480
tttctcccca tgtgatagtc tgaaatatgg cctcgtggga agggaaagac ctgaccgtcc
                                                                      540
cccagcccga cacccgtaaa gggtctgtgc tgaggaggat tagtaaaaga ggaaggcatg
                                                                      600
cctcttgcag ttgagacaag aggaaggcat ctgtctcctg cccgtccctg ggcaatggaa
                                                                      660
tgtctcggta taaaacccga ttgattgtac gttccatcta ctgagatagg gaaaaaacgc
                                                                      720
ctatctcacc tatcaccgcc tatcaccact ccctaatctc aagtacccag ggacacaaac
                                                                      780
actgeggace acteectaat etcaagtace cagggacaca aacaetgegg aaggeegeag
                                                                      840
ggtcctctgc ctaggaaaac caggtattgt ccaaggtttc tccccatgtg atagtctgaa
                                                                      900
atacageete gtgggaaggg aaagaeetga etgteeeeca geeegaeage egtaaagggt
                                                                      960
```

```
ctgtgctgag gaggattagt ataagaggaa ggcatgcctc ttgcagttga gacaagagga
                                                                     1020
                                                                     1080
aggeatetgt etectgeeeg teeetgggea atggaatgte teggtataaa accegattgt
gegttetate taetgagata gggaaaaace geettaggge tggaggtggg acatgtggge
                                                                     1140
agcaatactg ctttgtaaag cattgagatg tttacgtgta tgcatatcta aaagcacagc
                                                                     1200
acttaatect ttacettgte tatgatgeaa agacetttgt teaegtgttt gtetgetgae
                                                                     1260
                                                                     1320
cctctcccca caattgtctt gtgaccctga cacatccccc tctcggagaa acacccacga
atgatgaata aatactaagg gaactcagag gctggcggga tcctccatat gctgaacgct
                                                                     1380
ggttccccgg gtccccttat ttctttctct atactttgtc tctgtgtctt tttcttttcc
                                                                     1440
aaatctctcg tcccacctta cgagaaacac ccacaggtgt gtaggggcaa cccaccccta
                                                                     1500
catctggtgc ccaacgtgga ggcttttctc tagggtgaag gtacgctcga gcgtggtcat
                                                                     1560
tgaggacaag tcgacgagag atcccgagta catctacagt cagccttacg acatttgaag
                                                                     1620
                                                                     1680
ttctacaatg aacccatcag agatgcaaag aaaagcacct ccgcggagac ggagacatcg
caatcgagca ccgttgactc acaagatgaa caaaatggtg acgtcagaag aacagatgaa
                                                                     1740
gttgccatcc accaagaagg cagagccgcc aacttgggca caactaaaga agctgacgca
                                                                     1800
                                                                     1860
gttagctaca aaatatctag agaacacaaa ggtgaaacaa accccagaga gtatgctgct
tgcagccttg atgattgtat caatggtgtc tgcaggtgta cccaacagct ccgaagagac
                                                                     1920
                                                                     1980
agcgaccatc gagaacgggc catgatgacg atggcggttt tgtcgaaaag aaaaggggga
aatgtgggga aaagcaagag agatcagatt gttactgtgt ctgtgtagaa agaagtagac
                                                                     2040
ataggagact ccattttgtt atgtactaag aaaaattctt ctgccttgag attctgtgac
                                                                     2100
cttaccccca accccgtgct ctctgaaaca tgtgctgtgt caactcagag ttgaatggat
                                                                     2160
                                                                     2220
taagggcggt gcaggatgtg ctttgttaaa cagatgcttg aaggcagcat gctccttaag
                                                                     2280
agtcatcacc actccctaat ctcaagtacc cagggacaca aaaactgcgg aaggccgcag
ggacctctgc ctaggaaagc caggtattgt ccaaggtttc tccccatgtg atagtctgaa
                                                                     2340
atatggcctc gtgggaaggg aaagacctga ccgtccccca gcccgacacc cgtaaagggt
                                                                     2400
ctgtgctgag gaggattagt aaaagaggaa ggaatgcctc ttgcagttga gacaagagga
                                                                     2460
aggeatetgt etectgeetg teeetgggea atggaatgte teggtataaa accegattgt
                                                                     2520
atgetecate taetgagata gggaaaaace geettaggge tggaggtggg acetgeggge
                                                                     2580
agcaatactg ctttgtaaag cattgagatg tttatgtgta tgcatatcta aaagcacagc
                                                                     2640
acttaateet ttacattgte tatgatgeaa agacetttgt teaegtgttt gtetgetgae
                                                                     2700
cetetececa caattgtett gtgaceetga cacateeece tettegagaa acaceeacaa
                                                                     2760
atgatcaata aatactaagg gaactcagag gctggcggga tcctccatat gctgaacgct
                                                                     2820
ggtteccegg gteceettat ttetgtetet ataetttgte tetgtgtett tttettteet
                                                                     2880
aagtotottg ttocacotta ogagaaacac, cacaggtgtg gaggggcaac aagagactta
                                                                     2940
ggaaa
                                                                     2945
```

```
<210> 5122
<211> 741
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (742)...(205)
<223> similar to gi777776 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5122
tttttttggg ctgccctcat gggccagggt gtttattcac agagcaacag agtcagcaca 60
gggcagggaa cgcccaggcc tcagcatatc ctgagacctg cagcctgtcc cagcctgggc 120
ggggcaggtg tccggtccct ggctagggtc tgaccaagtg ctggatgtca cgtgaggaag 180
```

```
cggggccttg tctggggtgg tctacggatc actggtgaca tatgccggga gggtgacacc
                                                                      240
                                                                      300
atccgcattg aaaaggatgt tgtcaaagcc aggggctgtg gcctctgtgt tgctctggaa
                                                                      360
ggggcagete ceettettgt geagecagee cegteececa agteecagea geaccaggag
                                                                      420
catgagcaat aggagggcac tgccaaccac agctggcaca gacccgggtg cggctgtgtt
                                                                      480
ccccgggctg ggggcaggct gctggcaatg Ctgcccagcc agatactcca cgtcatccag
ggcaatgggc cccagggctg gctggccgcc cagagtggct tcaaacacga tctggaactc
                                                                      540
cttggcactg gctacctcca cctgggcctc cagccactgg tgccgccgat gcccgcctgc
                                                                      600
gececacaca gecagetgge cetgageact gtgcageagt acetteaget ecceettgta
                                                                      660
gaagtgetea ggaaaaceea tgtggtacea gaageggagg caggaggetg gggtggeegg
                                                                      720
cagaggeteg etgegeagee a
                                                                      741
```

```
<210> 5123
<211> 1521
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1522)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1448) ... (623)
<223> similar to gi453197 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5123
ttttttttt ttacatcttc actgtagaaa atttatttgc ctttccatgg acaacaatca
                                                                       60
tttgtattat tatcagtttt ctacaacacg tagagttgtc aaatagctta aagacaagga
                                                                      120
caagtataga cccttctaga atcagataac tcctagaaag gtcttctaga caatctgtag
                                                                      180
tgaagttaag taataccttc aagatttcac aaactgtaaa ctcgatctgg gaattcaacc
                                                                      240
cagatetata ttgttetgga aatteeagge tettttttte tgtateaaga agettttgga
                                                                      300
ctggaagagt gtttttcagc aggaattgtg gtattggcca cccatcaccc catttaatta
                                                                      360
aaaatccctg gcctacagga cctacagcaa tgtactgaag aacttcagaa cctcaattag
                                                                      420
ccatttgcca tcttgagaga gtcttgtcca tggttcaagt gttcccttgg aactcctgaa
                                                                      480
gggcttggag cttagtctga gccatgggaa atggccaaag agtctcaaga ttcccactgt
                                                                      540
atcctgtgcc ttggagcagg caaggagacc atggcagccc ctggccccgg tcagttcttg
                                                                      600
getttggcag ttccgggacc aggacgctgg tacagccgga ttatcccttc atcgtgtagc
                                                                      660
egettecaga ettetetete cagettgaag teatggttta tgtaaaagat cageegette
                                                                      720.
catgatgtat catagtagtg atcagaaaag cgctcatggc cctcagtgat gaagccataa
                                                                      780
gcactcacct ggtcacagag ctgaagggca gtgagcagca ggagggcccc agtggtgggg
                                                                      840
cggtatatec tecagtggge accatecagg gtettagace teagaaacet gttetteatg
                                                                      900
tatcggagaa agtctgggtg cagcaacagg tccctgtcca tgtgcagggc ttcccgaaaa
                                                                      960
gcttcctggg gtctgtgcct gaaccagaaa aggttttttg acatcaccgt ctgattcata
                                                                     1020
agcagtgett ccagecacte atagtecegg gtgeetteca ggaagtgeaa gtageggaeg
                                                                     1080
teetteecaa gaggeaegtt ettgaaaeee egattgeeea atataaggag tgaetgggte
                                                                     1140
agggagaagg eggtaaagee gtagaaggat gteegagtee eeacateetg ttegtageet
                                                                     1200
ttaatgagag etcegeteaa teggaacaeg tagtegtgae tgtetatete etggeeeatg
                                                                     1260
tgggagttgt tcaggatgcc cccgttgccc accaeggcac aggtgatgct ccggaggctc
                                                                     1320
```

```
ccageggga ggetggceag gageagetge tgetggggee etggagggaa gegtgtetee 1380 ecettttgen ecaaggagta gttgagetee atgaaaceaa agggtggtge aaagtgttee 1440 aggegegtae gagtgggeag teeeggnaat teeggneegg tnegaeggtt gtegaageta 1500 teaattnten ngnangeeee g
```

```
<210> 5124
<211> 5840
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(4096)
<223> similar to gi3449298 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<400> 5124 geoetgeeca ceteacgeag actgeeggga cetetggeag acettttett geacetgeea 60 gccaggttac tacggcccag gctgtgtgga tgcctgcctc ctgaacccct gtcagaacca 120 gggatcatgc eggcacctgc caggagecec ceatggetat acctgtgact gtgtgggtgg 180 240 ctatttcggg caccactgtg agcacaggat ggaccagcag tgcccacggg gctggtgggg gageceaace tgtggeeect geaactgtga tgttcacaaa ggttttgate ecaactgeaa 300 caagacaaat gggcagtgtc actgcaagga gttccactac cgaccgcggg gcagtgactc 360 ttgcctccca tgtgactgct accetgtggg ctccacctcg egetcatgtg caccccacag 420 cgggcagtgc ccctgtcgcc caggagccct tggccgccag tgcaacagct gtgacagtcc 480 ettegeagag gtgaeageea geggetgeeg ggtgetetat gatgeetgee etaagteeet 540 600 gagatetggt gtgtggtgge eccagacaaa gtttggegte etggecacag tgeeetgtee ccggggggcc ctgggattgc ggggtgcagg tgctgctgtg cggctgtgtg atgaggccca 660 gggttggctg gagcccgacc tcttcaactg tacctccct gcctttcgag agctcagtct 720 gctgctggat ggcctagagc tgaacaagac ggcactggat accatggagg ccaagaagct 780 ggeteagegg etacgggagg tgactggeea cactgaceae tattttagee aagatgtteg 840 agtcactgcc egectgetgg eccacetget ggeettegag agecateage agggettegg 900 getgacagec acacaggatg eccaetteaa tgagaatetg etgtgggeeg getetgeaet 960 gettgeecea gagacagggg acttgtggge ggegetgggg eagegggeec etgggggete 1020 cccaggcagc gcgggactgg tgaggcacct ggaggagtat gcagccacac tcgcaaggaa 1080 tatggaactc acatacctga atcccatggg gctggtgacg cctaatatca tgctcagcat 1140 tgaccgcatg gagcacccca gttctccccg gggggcccgt cgctaccctc gctaccatag 1200 caacctettt egaggeeagg atgeetggga teeteacace catgtgetge tgeetteeca 1260 gtccccacgg ccatccccat ctgaagttct gcccacaagc agcagcatag aaaactccac 1320 cacctcaagt gtggtccccc caccagcccc gccagagcca gagcctggga tctccattat 1380 cattetecte gtttacegea cettaggggg actgetecet geccagttee aggeagaaeg 1440 ecgaggtgcc aggetteete agaaccccgt catgaactec ccggtggtca gcgtggctgt 1500 gttccacgga cgcaacttcc taaggggaat cctggagtcc cccatcagcc tagagtttcg 1560 cctgctacag acagcgaatc ggagcaaggc gatctgtgtg cagtgggacc cacctggcct 1620 ggcggagcag catggtgtgt ggacagcacg ggactgcgag ctggtgcaca ggaatgggtc 1680 ccacgcacgg tgtcgctgca gccggacagg gacctttggg gtcctcatgg atgcctctcc 1740 ccgtgagagg ctggagggcg acctggagct gctggctgtg ttcacccacg tggtcgtggc 1800 tgtgtctgtg gctgcgctgg tgctgactgc agccatcctg ctgagcctgc gcagcctcaa 1860 gtccaatgtg cgtgggatcc atgccaatgt ggcagccgcc ctgggggtgg cagagctcct 1920 ettectgetg gggatteaca ggacceacaa teagetggtg tgeactgeag tegteateet 1980

```
cetgeactae ttetteetea geacettege gtggetette gtgeagggge tgeaceteta
                                                                    2040
cegcatgeag gttgageeac geaacgtgga eegeggegee atgegettet accatgeeet
                                                                    2100
gggctggggc gtccctgctg tgctgctggg ccttgctgtg ggcctggacc ctgagggcta
                                                                    2160
tgggaaccet gacttetget ggateteagt ceaegageee eteatetgga getttgetgg
                                                                    2220
ccctgttgtc ctggtcatag tgatgaacgg gaccatgttt ctcctcgctg cccgcacatc
                                                                    2280
ctgctccaca gggcagaggg aggccaagaa gacctctgca ctgacccttc gcagctcctt
                                                                    2340
cetgetgett etgetggtea gtgeeteetg getetttggg eteetggeag teaaceaeag
                                                                    2400
catectagee ttecactace tecatgetgg actetgegge etceagggee tggeggtget
                                                                    2460
getgetette tgtgteetaa atgeagatge tegggetgee tggatgeeag eetgtetggg
                                                                    2520
caggaaggca gcgcctgagg aggcaaggcc agcacctggg ctgggacctg gggcctacaa
                                                                    2580
caacacggct ctctttgagg agagtggcct catccgcatc actctgggcg cctccaccgt
                                                                    2640
etectetgtg ageagtgeec geteeggeeg gacceaggae caggaeagee ageggggeeg
                                                                    2700
cagetacete agggacaatg teetggtteg acatggetea geegetgace acaetgacea
                                                                    2760
                                                                    2820
cagcetecag geteatgetg gececactga cetggaegtg gecatgttee ategagatge
2880
tecatettea gaaagegagg acaatggeeg gaegeggggg egetteeaac ggeeactetg
                                                                    2940
ccgagcagcc cagagtgaga ggctcctcac ccaccccaaa gatgtggatg gcaatgacct
                                                                    3000
cetytectae tygecagece tyggggagty cyaggeagee ecetytyete tycagaetty
                                                                    3060
gggctctgaa aggcgcctgg ggctggacac cagcaaggat gcagctaaca acaaccagcc
                                                                    3120
agacceggee etgaccagtg gggatgagae ttetetggge egggeecage gecagaggaa
                                                                    3180
aggeatectg aagaaceggt tgeaatacee actggtgeea cagaceegag gtgeeeetga
                                                                    3240
getgteetgg tgeegtgeag ceacettggg ceacegtget gtgeeagetg cetettaegg
                                                                    3300
togcatotat gotggcggg goacgggcag cotttoacag coagcoagco gotactotto
                                                                    3360
tagagaacag ctggacctgc tcctccggcg gcaactgagc cgtgagcgac tagaggaagc
                                                                    3420
ecctgeeect gttetaegte ecctgageeg geeagggtee caggaatgea tggatgetge
                                                                    3480
accaggeega etggageeca aagategggg eageaceetg eeaeggagge agecaceteg
                                                                    3540
ggactaccct ggcgccatgg ctggccgctt cgggtcacgg gatgcgctcg acttaggggc
                                                                    3600
acetegagag tggttgagea egetgeetee geecegeege accegggace ttgacecaca
                                                                    3660
geoccacct etgeceetgt etecceageg geaactetea agggaceece tettgecate
                                                                    3720
ceggeegetg gactetetgt etaggagete gaactetegg gageagetgg accaggtgee
                                                                    3780
tagccggcac ccctcacgag aagcccttgg gccactcccg cagctgctca gagctaggga
                                                                    3840
ggacteggte agtggeecea gecatggeec etecacagaa cagttggaca ttettteete
                                                                    3900
catcettgee tettteaact ceteggeeet etectetgtg caatetteaa geacaceett
                                                                    3960
gggccetcac accactgcca caccttetgc cacageetet gtgettgggc cetecaegee
                                                                    4020
acgttctgcc acgtctcaca gcatctcgga gctgtcgcca gactcagaag ttcccagaag
                                                                    4080
tgagggtcac tcctgagggg atgacggcgt ggacgaggaa cagctgaggg cgacagagga
                                                                    4140
tetaggetaa caggagagae tecaggagtg ggggeagate ceaaggeage etectgetee
                                                                    4200
ccagtggtgg gtgccccagc tctacctggt gtggcagggc tgaggctcca tgtgcatctg
                                                                    4260
tgagcatgcg tgtgacaggt gcagagacgg gggactggag ggagactttt atacgttttg
                                                                    4320
tacctttgta accagagaga tgcttatgtt atttttcagc ttttctqtct cctqqqqqqt
                                                                    4380
ttgaggctgg gctgggaggg ggagggagat agagggagag atgcagtttg accccatttg
                                                                    4440
ggtcctgagc aaaccetatg ctcatetete teteetteet ggggtggaet cagatgggtg
                                                                    4500
ggacacatgc cttcctcccc ctattccacc cccaagttga tctgagtatc gtcaggggcc
                                                                    4560
caaagtacag aattgttctt tgctttttat tgaatgctcc aaaggccaaa cttctggggc
                                                                    4620
tgggggttgg tettggaaac aggggteete tgaetteete atgggggett geteataceg
                                                                    4680
cccctcctgg tggatgtgtg tgtttattat gtggagtccc tgccacttac tgccttatga
                                                                    4740
cctaggactg atgctgtggg gtgctggtgg agcagctgat gtcgtgttta cagagcaagg
                                                                    4800
ettecetgte teceaegggg aggggetegg geetetagte agacatteet geagagggte
                                                                    4860
ggtggagggg tcattcacct gcccctgcag caagcaaaag ttgtctgtgg tgccatttga
                                                                    4920
ttccctgaca ctgcccctg cttgaattga ttccgaaggg tagggtggga aggtgagcaa
                                                                    4980
agggagcaga aacaagggaa ttcaagaccc agaatgtagg tgccactgcc tcctatgttt
                                                                    5040
acaggatect cegtggeeet aggeaectgg getgeaggaa gtgaeteegt tecacteete
                                                                    5100
ctttattccc ttaaaaaggg aaaaatgact gttacgaccc tgttcacaaa actcttactt
                                                                    5160
ttgctatttt gtctgctgtc cagaactgaa gactttaaaa ttttgttact gtttacaagt
                                                                    5220
ccagattcaa aaaatgtttt tactttgttt acaactcaaa actttgagtt ttacactttg
                                                                    5280
tttacagtag ataattttt ttcctttgtt tccaagtgaa aggtagggaa agtgggagag
                                                                    5340
ggacttggag gacccacctg tgaggaccct gacctggcca tcttgagggg ttttctaacc
                                                                    5400
```

```
cccaggtctc ccaggccgaa ggtcagcctt gagtcccgtt taacagcaga tccagaagac
                                                                     5460
cttgagagta ggcgtcctct aaccacgggg gagagtggct gtgcagggct ggggggtggt
                                                                     5520
ctqtgcaqac acctcctcac ccaccaccc atgcatactc ttgggaagca gcttcctggg
                                                                     5580
agattagaaa ttctacttcc ctgactggag ctaaatccca ccagccagga cccaaactct
                                                                     5640
ccttaccgag aaggacccca gctcttgaag ggctgagtgg cctgctgggg gtgggagggt
                                                                     5700
gtetttaeta tgteetaggt ttegtagatg eceetetetg gggtteeeet eetecageee
                                                                     5760
ageggeeete ttteetgtet gtgtaaattg tteegtgaag eegegetetg ttttgggaat
                                                                     5820
                                                                     5840
aaacttctat agaaaacaaa
```

```
<210> 5125
<211> 1697
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1585)...(1292)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400>-5125 tttcgtgtgg tgggctgcgg gtaggggagg ggatggaccg agtcccggct tgtcgggatg 60 agggtteegg aagatetgge cagtaagatt etacteeetg getgtgeace gggtteeeta 120 cccctgtcta cgtcggctcc gccacttcgc ggcttgagac taaaagagca tcccggcagg 180 gggccttcca gccccaaagc agcctgtcca gagaccccca aattctgatc ctgaagttgg 240 aggcctccgg ggatgttctt ttttaatctt ttaaaagggt tagaggggtt gaggctgcct 300 gaccccagcc taatggggta ggtaggcctt gggaagtgga gcatgggggc aaaggatcca 360 ageattgage etteateete tatteeeeat eeagtggggt geegaggete aggeageatg 420 acgacggaga cctttgtgaa ggatatcaag cctgggctca agaatctgaa ccttatcttc 480 attgtgctgg agacaggccg agtgaccaag acaaaggacg ggcatgaggt tcggacctgc 540 aaagtggcgg acaaaacagg cagcatcaat atctctgtct gggacgatgt tggcaatctg 600 atccageetg gggacattat ceggeteace aaagggtaeg etteagtttt caaaggttgt 660 ctgacactat atactggccg tgggggtgat ctgcagaaga ttggagaatt ctgtatggtt 720 tattctgagg ttcctaactt cagtgagcca aacccagagt acagcaccca gcaggcaccc 780 aacaaggegg tgeagaacga cageaaceet teagetteee ageetaceae tggaeeetet 840 gctgcctctc cagcctctga gaaccagaat gggaatggac tgagtgcccc accaggtccc 900 ggtggtggcc cacatccccc tcatactccc tcccacccac ccagcacccg aatcactcga 960 agccagecca accacace tgeaggeeeg cetggeeett ceageaacce tgttagtaac 1020 ggcaaagaaa cccggaggag cagcaagaga tagcatgaca ttctttcttc ctgccaccaa 1080 ccacatecca agtgteccet ggagageaag atageettee aetgattgge tggtgtagea 1140 gtattttage cactgaactt cagtggaggg tggtgagcag tgtccttatc caccctaatc 1200 tcatactede teatigica geigaactae eigiceeetg ggagicagga eecicigeet. 1260 gctctctttc ctctttagaa atggcagtta ctggctgggc gcagtggctc acgcttgtaa , 1320 teccageact ttgggaagee gaggtgggeg gateacetga ggtegggagt teaagaceag 1380 cctgaccaac atggagaaac cccgtgtcta ctaaaaatac agaattagcc aggcatggtg 1440 gcgtatgcct gtaatcccag ctacttagga ggctgaggca ggagaatctc ttgaaaccgg 1500 gaggeggagg ttgaggtgag ecgaaattge accattgeac tecageetgg geaataagag 1560 1620 accatctgtt tettetgtgt gagacatggg agtetaactg aagtetetee tteetaataa 1680 atgttaccac ttctaaa 1697

```
<210> 5126
<211> 2577
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (475)...(1294)
<223> similar to gi310660 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5126
atttccatga aatgggatca agtggaggtg atcccatata ttgcctgtgg gaatgccagt
                                                                     60
totaacagot otgogggtgg cogootggta tootttgaag tgocacagaa cacotcagto
                                                                    120
aagattegge aagatgeeae tgeeteaetg attttgetet ggaagggeae ggeeaeagga
                                                                    180
ttecaacagt geteceteat agatggaega agtgtgaece eeetteagge tteaggggga
                                                                    240
ctggtcctcc tggaggagat gctcgccttg gggaataatc actttattgg ttttgtgaat
                                                                    300
gattetgtga etaagtetat tgtggetttg egettaacte tggtggtgaa ggteageace
                                                                    360
tgtgtgccgg gggagagtca cgcaaatgac ttggagtgtt caggaaaagg aaaatgcacc
                                                                    420
acgaagccgt cagaggcaac tttttcctgt acctgtgagg agcagtacgt gggtactttc
                                                                    480
tgtgaagaat acgatgettg ccagaggaaa cettgecaaa acaacgegag etgtattgat
                                                                    540
gcaaatgaaa agcaagatgg gagcaatttc acctgtgttt gccttcctgg ttatactgga
                                                                    600
gagetttgec agtecaagat tgattactge atectaaace catgeagaaa tggageaaca
                                                                    660
tgcatttcca gtctcagtgg attcacctgc cagtgtccag aaggatactt cggatctgct
                                                                    720
tgtgaagaaa aggtggaccc ctgcgcctcg tctccgtgcc agaacaacgg cacctgctat
                                                                    780
gtggacgggg tacactttac ctgcaactgc agcccgggct tcacagggcc gacctgtgcc
                                                                    840
cagettattg acttetgtge ceteageece tgtgeteatg geaegtgeeg cagegtggge
                                                                    900
accagetaca aatgeetetg tgatecaggt taccatggee tetaetgtga ggaggaatat
                                                                    960
aatgagtgcc tctccgctcc atgcctgaat gcagccacct gcagggacct cgttaatggc
                                                                   1020
tatgagtgtg tgtgcctggc agaatacaaa ggaacacact gtgaattgta caaggatccc
                                                                   1080
tgcgctaacg tcagctgtct gaacggagcc acctgtgaca gcgacggcct gaatggcacg
                                                                   1140
tgcatctgtg cacccgggtt tacaggtgaa gagtgcgaca ttgacataaa tgaatgtgac
                                                                   1200
agtaacccct gccaccatgg tgggagctgc ctggaccagc ccaatggtta taactgccac
                                                                   1260
tgcccgcatg gttgggtggg agcaaactgt gagatccacc tccaatggaa gtccgggcac
                                                                   1320
atggcggaga gcctcaccaa catgccacgg cactccctct acatcatcat tggagccctc
                                                                   1380
tgcgtggcct tcatccttat gctgatcatc ctgatcgtgg ggatttgccg catcagccgc
                                                                   1440
attgaatacc agggttcttc caggccagcc tatgaggagt tctacaactg ccgcagcatc
                                                                   1500
gacagcgagt tcagcaatgc cattgcatcc atccggcatg ccaggtttgg aaagaaatcc
                                                                   1560
eggeetgeaa tgtatgatgt gageeceate geetatgaag attacagtee tgatgacaaa
                                                                   1620
cccttggtca cactgattaa aactaaagat ttgtaatctt tttttggatt atttttcaaa
                                                                   1680
aagatgagat actacactca tttaaatatt tttaagaaaa taaaaagctt aagaaattta
                                                                   1740
aaatgctagc tgctcaagag ttttcagtag aatatttaag aactàatttt ctgcagcttt
                                                                   1800
tagtttggaa aaaatatttt aaaaacaaaa tttgtgaaac ctatagacga tgttttaatg
                                                                   1860
taccttcage tetetaaact gtgtgettet actagtgtgt getettttca etgtagacae
                                                                   1920
tatcacgaga cccagattaa tttctgtggt tgttacagaa taaqtctaat caaqqaqaaq
                                                                   1980
2040
gcatatgatg tataatagag tatacccgtt acttaaaaag aagtctgaaa tgttcgtttt
                                                                   2100
gtggaaaaga aactagttaa atttactatt cctaacccga atgaaattag cctttqcctt
                                                                   2160
attetgtgea tgggtaagta aettatttet geaetgtttt gttgaaettt gtggaaaeat
                                                                   2220
```

```
tctttcgagt ttgttttgt cattttcgta acagtcgtcg aactaggcct caaaaacata 2280 cgtaacgaaa aggcctagcg aggcaaattc tgattgattt gaatctatat ttttctttaa 2340 aaagtcaagg gttctatatt gtgagtaaat taaatttaca tttgagttgt ttgttgctaa 2400 gaggtagtaa atgtaagaga gtactggttc cttcagtagt gagtatttct catagtgcag 2460 ctttatttat ctccaggatg tttttgtggc tgtatttgat tgatatgtgc ttcttctgat 2520 tcttgctaat ttccaaccat attgaataaa tgtgatcaag tcaagggaaa aaaaaaa 2577
```

```
<210> 5127
<211> 6152
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1906)
<223> similar to gi3327076 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5127 gegeetgege atagaceeca getgeecaca getteectae actgtgeate ggatgtteta 60 cgaggccctg gataagtatg gggacctcat cgctttgggc ttcaagcgcc aggacaagtg 120 ggaacacate tectactece aatactacet getegeeege agageegeea agggetteet 180 gaagetegge etgaageagg eecacagtgt ggecateete ggetteaact eeceggagtg 240 gttetteteg geagtgggea eagtatttge aggtggeate gteaetggea tetaeaceae 300 cageteecca gaggeetgee agtacatege ttatgactge tgegeeaatg teateatggt 360 cgacacgcag aagcagctgg aaaagatcct gaagatctgg aaacagttgc cacatctaaa 420 ggcagtcgtg atatataaag aacctcctcc aaacaagatg gccaatgtgt acacgatgga 480 ggaattcatg gagctgggga atgaagtgcc tgaggaagcc ctggacgcca tcattgacac 540 ccagcagccc aaccagtgct gtgtgctagt ctacacttcc ggcaccactg ggaaccccaa 600 gggcgtgatg ctgagtcaag acaatatcac gtggacggca cggtacggca gccaggccgg 660 tgacateegg eeggeagaag teeageagga ggtggtagte agetaeetge eeeteageea **720** tattgccgcc cagatctacg acctgtggac aggcatccag tggggggccc aggtttgctt 780 tgccgaaccc gacgccctga aggggagcct ggtgaacacg ctgcgggagg tggagcccac 840 atcacacatg ggggtgcccc gggtatggga gaagatcatg gagcgcatcc aggaggtggc 900 ggctcagtct ggcttcatcc ggcgaaagat gctgctgtgg gccatgtcgg tgaccttgga 960 gcagaacete acetgeeceg gcagegaeet gaagecette acaaceagae tggcagatta 1020 cctggtgcta gccaaggttc gccaggcact gggatttgcc aagtgtcaaa agaacttcta 1080 tggagcggcc cccatgatgg cagagacaca gcacttette etgggtetea acatecgett 1140 gtatgcgggc tacggcctca gtgagacctc aggcccccac ttcatgtcca gtccctacaa 1200 ctaccggctg tacagctcag gcaagttggt gcccggctgt cgggtgaagc tggtgaacca 1260 ggacgcagag ggcattggcg agatctgcct gtggggccgc accatattca tgggctacct 1320 gaacatggag gacaagactt gtgaggccat cgacgaggaa ggctggctgc acacgggtga 1380 tgctggccgc ctggacgccg atggcttcct ctacatcact gggcgcctca aagaattaat 1440 catcacaget ggtggggaga atgtgeeece tgtgeeeate gaggaggeeg tgaagatgga 1500 gctgcccatc atcagcaacg ccatgctcat tggggaccag aggaagttcc tgtccatgct 1560 geteacettg aagtgeacte tggacecaga cacetetgae cagactgata atetgactga 1620 acaagctatg gagttctgcc agagggtggg cagcagagcc accacagtgt ccgagatcat 1680 agagaagaag gatgaggccg tgtaccaggc catcgaagag gggatccgga gggtcaacat 1740 gaacgcggcg gcccggccct accacatcca gaagtgggcc attctcgaga gagacttctc 1800 catttcgggt ggagagttgg gtcccacgat gaaactgaaa cggctcacag ttttggagaa 1860

```
1920
gtacaaaqqt atcattqact ccttttacca agagcaaaaa atgtaatcaq ggcctatgcc
tgcagtttct atagaataga gggcaggcgt tccgagcctc ttcctgagcc ccaggtctct
                                                                    1980
                                                                    2040
tcagtctggg cacaggcatt tctgccaagt ctgttagatc tccaggtcag ggcacagcac
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tggctctaca tttaccaggt cttacgccaa caatagctga caattccaag aagcttcacg
tgtgggtagt tttaattcag tttaagtatt gctttttgtt caggtgacaa atgagatcag
                                                                    2160
ctctccttcc agaacgaaag ggctgataat ttttggcctt agttccaggt agattaaaaa
                                                                    2220
                                                                    2280
getgetaget cacatacagg acagecagea gtaggetgtg gagegggtag gagagagatg
gctgatactg ctcacgtgcg ctgcaggaaa agcaatcagt cacaactcac ctagcgacct
                                                                    2340
gacttactct ggaatcttgg cgggcatcgc cgaccctatt attccattac caggcactcc
                                                                    2400
                                                                    2460
gccacccaca tgccaactga cttgatgctt aataaaactg ctgctgcctg tttgattcta
tttaatgtat aatttgaata ttaaaccttt taacagaact gtcaacaagg acctgatttt
                                                                    2520
ttttgtcaat tgagcaggtg ggaccagtgc agagagtagt gggcatttaa ctcacaggac
                                                                    2580
tgtgcacagc gggcatgcga gtgaccatta gtgccctgga ataaacaaag gtgcaggatg
                                                                    2640
gggtcaagtg gcgcattctc ataaaagcag ccagctttac gttagcctgt cgccaccaga
                                                                    2700
ccaccccact tccattctga atacgggaag cagccattct cagtagcaag ctgagccaaa
                                                                    2760
                                                                    2820
atgaccgaag gcatttgaac aggaaacagg tagagaaagc aaacatctca gttttggaat
tetttattae tttgaaccca agageeeetg ataactggea caatecaatg aaacagagga
                                                                    2880
agcagcagct taaacaaagg aaaatacatt taagattata agtctggggg ggcggttaca
                                                                    2940
agettaaaaa gtgacccaga cagggatate attgetaaaa aaaaaaaaat cecettgtga
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cctgggtaca ttttgcaaag ccacaggttt gcaatgttac acaagggcca aaggaggcca
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tgagttgtct ttggttgtgg ggacagaggg taactgttca tgaaaatagt gagtgtctga
                                                                    3120
agattaagaa aatcatgctg cagcagagga gaagggagag gaagacagga agggaaagga
                                                                    3180
gatgeetgag ggteaaaage tgageecaag cetaageeca ageteaaget caageeccag
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catggcataa ttttgtgaat taactcaggc tgagttgcct ccagtctttg gaatgtcatc
                                                                    3300
ttatactggt actgctgagg cagagggcag taattggtgc tttgggatag gagaaggggc
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agttgctgaa atacaaaatt aatagcatcc caagttcctc aattgcagcc aaaatacatg
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tgttcgggcc tttcggcagt atcgccccca gaactacctg ctgtagtgtg gtccattccc
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agacagcaac atgcaagaat aagtttacaa tacactcagc ccttctggct tcagatcagg
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ggctcagagg ctgtgacaac tcatgatgct gaaaatgtat ccagtgaaaa tgaagtacta
                                                                    3600
getetetget teattaaaag etettggaaa gaatattaaa teteaagaca acaaaataat
                                                                    3660
tgaacacaca atacatttgt gtctttgtat ccaatatatt acctttgtct tattaacaaa
                                                                    3720
aattatatet eteattatat atttettgga tetgaagttt ttatteacae teagtaattt
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ctgtaaagga caaatctgtc tctattttcc atatcattta gaaatatacc acattcactc
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cattttgtgc tattatgtca atatcctgtt ttatttccat tatgtttttc aaaaaccgaa
                                                                    3960
gaaaataagg tttttcttaa aaagttagac attttctctt gttaattctg tatcctgtta
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tttacagctg aagagaaact attttaactt aagtgtaaaa tggtttagaa tagcaaatga
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tacagtccac tcagagttta caaaaaaaac atttaccagg tagacactta ataaataaaa
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caagcacttg gaaaaagttc tttgaaaaca gacctaggga catccacctg catcttttgc
                                                                    4200
acagattttg ttaagaaaag gccagatcta aaaatgtact gtcaagaaac aagcaaacca
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atgtaaatgc cagttgtaga agtgttaatc taaatctttt actcggcgac agatttcctc
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tgtgaagtet gageattttg cattgeetee caaatetttt gteaagetet gagaaaagga
                                                                    4440
4500
tcagtgagat gccacctggg caagttactc ggctgctctt tcatttagtt cctcatttca
                                                                    4560
aagtgaggaa ccactccacc accatctacc cagcccagga ggatcgggat ccaatctcat
                                                                    4620
agtgtataca acagcactct gcaaagaata aggtgctctt gatgcaaagg gaggcaggga
                                                                    4680
getttaccaa aatttteeet ttgtteacac aatagaeeet aacccagatt agttggteat
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ggatatttaa ataaaagcga atctaaataa gaagtttcat aaaaatcctt gggaaatatq
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tctcaggaat agacctgaga catattttga tctatttttg tttttattat tattttttt
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ttagatggag teteactetg ttgeccagge tggagtgeag tggcacgate ccageteace
                                                                    4920
acaacctetg cetectgggt teaagegatt eteetgeete agegteetga atagetggaa
                                                                    4980
ttacaagtgc atgccaccat acccaactaa tttttgtatc tgatctattt ttggaggctg
                                                                    5040
ggacacaaat acgaaagaaa tatttaaatc attaactctt tttttttt taagagatgg
                                                                    5100
ggtctcacta tgtggcccag gctggtcttg aactcagagg ctaaggtgat cctcctgcct
                                                                    5160
cagectatag etgeaactae aggeatgeae caccacacet geetaaatea ttaactetta
                                                                    5220
aacctccctc tttaggaaag aaagcctccc atacaactga tctgttctac cagcttatcc
                                                                    5280
```

```
tttctttcct gcatacagac cccaatatat ttaattctct ttatctttcc atcctacaca
                                                                     5340
ataaaagggc ccactatgta attcaggcac ctctctactg ggctgtagat tataacttcc
                                                                     5400
caaatataac tttaaagaat aagaaaatca tatgacctcc aatgtgacta tcaggctgtt
                                                                     5460
aaaaacaagc ctgaatttct tgtattttgg ccacacgata taatttcaaa ttacagaatt
                                                                     5520
tttttaaaag aagggaccaa ctttgaagat attacgctaa gtgaaataag ccagactcaa
                                                                     5580
aggacaaata ctgtatgatt ccacttacat gaggtaccta gagtagtcaa attcatagag
                                                                     5640
acaggaagca gaatggcagg tgtcagagga tgggaggggg aagggaaagt tactgtttaa
                                                                     5700
cgggtgcaga gtctcagttt gagaaaatga aactggtctg gagatgactg atggtgatgg
                                                                     5760
ttacattaca atgtgaatgt acttaacatt attgaactgt atacctaaat acggctaaaa
                                                                     5820
tggcaaattt tatgttatgc atatttttca caatttttgt taaaaaggac ctcaaattag
                                                                     5880
ggatgagtct tcaagtgcat tatttcctct aacttcggaa tagcccgcga cacttcttcc
                                                                     5940
acaggecaca attgettace gaggeggtgg agettgttgg gtaaggeeca gaetgegtgt
                                                                     6000
taataccaac ttgggtcatt taggagctgt aaaaccttgg acatattatt tattctctct
                                                                     6060
gtacctcagt ttcctcatct ataaaatgga attatagcat ctacttcaaa gagttataga
                                                                     6120
aaaactttgc tgagatgata tataaagaac tt
                                                                     6152
```

```
<210> 5128
<211> 2771
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(497)
<223> similar to gi4884128 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5128 gatetgageg eeggeeggg tgeecaggea etceettgge gggeeggatg geggaeeeeg 60 gcccagatcc cgaatctgag tcggaatcgg tgttcccgcg ggaggtcggg ctctttgcag 120 actittactic ggagaagage cagittetgtt tetgtgggca tgtgetgace atcaegeaga 180 actttgggtc ccgcctcggg gtggcggcgc gcgtgtggga cgcggccctg agcctgtgca 240 attatttcga gagtcaaaat gtggatttcc gaggcaagaa ggtgatcgaa ctgggtgcgg 300 ggacaggcat cgtggggatc ttggcagcgc tgcagggagc ttatggtcta gtgagggaga 360 cagaggacga tgtcatagaa caagaactct ggcgaggtat gcgtggagcc tgtggacatg 420 ctctatccat gtctaccatg actccctggg aatccatcaa gggaagctct gtcaggggg 480 gatgttacca tcactgacct gcccctggcc ctagaacaga tccagggcaa cgtccaggcc 540 aatgtgccag ctggaggcca ggcccaggtg cgtgccttgt cctgggggat tgaccatcat 600gtettecetg cáaactatga eetggtgetg ggggetgata tegtgtaeet ggaacecaee 660 ttccctctgc tgctggggac cctccaacac ctgtgcaggc cccatggcac catctatctg 720 gcctccaaga tgagaaagga gcatgggaca gagagcttct ttcagcacct cctgcccag 780 catttccaac tggagctggc tcagcgggat gaggatgaaa atgtcaacat ctatagggcc 840 aggcacaggg aaccaagacc tgcttgacat caccettgct gttcttctca atctcttgct 900 ctaatgaagg aactgtgtat ctcaaaaacc atatttccag agccacaaac atgaggacca 960 aaaaggatgg atttccctgg cctctctcac tttcctcctt ccctctttgt taccccagat 1020 actettggge aggtgeagtg aggtgeetge ttacaaggaa teecagagtt etggeageae 1080 tagtgttaga acaccaagga ggttcctggc tcctgttctc agagaaggag gatggtaagg 1140 tatccaggat ttttaggggg taagggagat atatgggatg tgagagcagt gattgtagac 1200 agactgtcac tgatcacttc cattcctgtt gctgtttaca cagaatggac tttaaaaaaa 1260 ttctgtggga ttttttttc ttttttctt ttttttgaga cagggtctca ctctgtcatc 1320

```
1380
caagetggag tgcagtggtg tgatcacage teactgcage etcaacetet gaaggeecag
atgatettee tgeeteaget ecceaagtag etgggaetag aggeatgege caccacace
                                                                     1440
                                                                     1500
ggctaatttt tgtattttca gtagagacag ggtttcgcca tgttgcccag ggtggtctca
                                                                     1560
aactcctggg ctcaagtgat ccacccgcct tgcctcccaa agtgctggga ttgcaggcat
ggcccactgt gctagcctag gattttttt ttttttaag aaagaattaa gccttaaaaa
                                                                     1620
                                                                     1680
tctattgtgc aagaacccaa cttttactca ggagctgaga aggaagaagc ctcaaaccac
                                                                     1740
ccatttcctg ctttttagag atagagtcta gtggaaccat ggctctaact gggtcaagtc
ctcctagctc tgaagctaag gctgcagagc tgtcctttgg actgtagttt cttcatgctt
                                                                     1800
tecagagtta gageettgat caeggaacat cattgtgtge agaagaatae tgtaeetagt
                                                                     1860
actaagttct tttcatcttt gatttttctt tagcttcatc agtccttcct tcctaatctc
                                                                     1920
                                                                     1980
taateeeetg aageetaaea eagtteetaa tgtgttttge ettaaeetet tttetettee
                                                                     2040
cacattggta cttctggttg gggctctctt tacttactgc ttaggcacat agtcaccttc
                                                                     2100
totggactoc otgottocat gotttotoct toagtocatt cogcaaacto ttgtgatott
ccaaaattag ctctgattag ctttcacttc ctgtagaagc aagaacaagc tcctctgctt
                                                                     2160
ggtacttagt ctgtgtccat gtgatccaaa attaccttcc tattgcattt cctactcctt
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tgctacgtgt attggacctc tggccaaatt acaaaagatg tactctttgt tctctaaaac
                                                                     2280
cacactaaag ttttctgact tctttcacac tctttatgat aatcctctgc ctgaaaggct
                                                                     2340
attgccacct gtcaaaatct tcattattct ttgcctcttt cctgagcctc ttgcttgaat
                                                                     2400
gtgatttctt tctccctgag acccataagg ttcatcttat gggaccttaa tttgtcttgc
                                                                     2460
atggacattt gtgattctca ttttctcacc attaaattac cttggagggt agggctgtgg
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tttactcctg tctaaacccc tgaagcctaa cacagttcct ggcacacaac aggtgttcaa
                                                                     2580
cagatattgt gctcattcaa taaatattta ctcgctttgt ttaatggatt ccaccctgc
                                                                     2640
cttcctaggt gaccttggac aaattctcga acccattcac caaccacac agtttgttgt
                                                                     2700
gagtcataaa tggataatga atataaatgc gcattgaaaa taaacataaa atgttaccca
                                                                     2760
                                                                     2771
caaaaaaaa a
```

```
<210> 5129
<211> 2629
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1278)
<223> similar to gi3169158 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

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<400> 5129
tttegtetgg gaegaggtgg cecagegete agggtgegag gageggtgge tagtgatega
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cegtaaggtg tacaacatca gegagtteac cegeeggeat ecaggggget ecegggteat
                                                                      120
cagccactac geogggeagg atgccaegga tecetttgtg geettecaea teaacaaggg
                                                                      180
ccttgtgaag aagtatatga actctctcct gattggagaa ctgtctccag agcagcccag
                                                                      240
ctttgagccc accaagaata aagagctgac agatgagttc cgggagctgc gggccacagt
                                                                      300
ggageggatg gggeteatga aggeeaacea tgtettette etgetgtace tgetgeaeat
                                                                      360
ettgetgetg gatggtgeag eetggeteae eetttgggte tttgggaegt eetttttgee
                                                                      420
ettectecte tgtgeggtge tgeteagtge agtteaggee eaggetgget ggetgeagea
                                                                      480
tgactttggg cacctgtcgg tettcageae etcaaagtgg aaccatetge tacateattt
                                                                      540
tgtgattggc cacctgaagg gggcccccgc cagttggtgg aaccacatgc acttccagca
                                                                      600
ccatgccaag cccaactgct tccgcaaaga cccagacatc aacatgcatc ccttcttctt
                                                                      660
tgccttgggg aagatcctct ctgtggagct tgggaaacag aagaaaaaat atatgccgta
                                                                      720
```

```
caaccaccag cacaaatact tcttcctaat tgggccccca gccttgctgc ctctctactt
                                                                       780
ccagtggtat attttctatt ttgttatcca gcgaaagaag tgggtggact tggcctggat
                                                                      840
                                                                      900
gattacette taegteeget tetteeteae ttatgtgeea etattgggge tgaaageett
                                                                      960
cctgggcctt ttcttcatag tcaggttcct ggaaagcaac tggtttgtgt gggtgacaca
gatgaaccat attcccatgc acattgatca tgaccggaac atggactggg tttccaccca
                                                                     1020
gctccaggcc acatgcaatg tccacaagtc tgccttcaat gactggttca gtggacacct
                                                                     1080
caacttccag attgagcacc atcttttcc cacgatgcct cgacacaatt accacaaagt
                                                                     1140
ggeteceetg gtgeagteet tgtgtgeeaa geatggeata gagtaceagt ceaageeeet
                                                                     1200
gctgtcagcc ttcgccgaca tcatccactc actaaaggag tcagggcagc tctggctaga
                                                                     1260
tgcctatett caccaataac aacagccacc ctgcccagtc tggaagaaga ggaggaagac
                                                                     1320
tctggagcca aagcagaggg gagcttgagg gacaatgcca ctatagttta atactcagag
                                                                     1380
ggggttgggt ttggggacat aaagcetetg acteaaacte etceetttta tettetagee
                                                                     1440
acagttctaa gacccaaagt ggggggtgga cacagaagtc cctatgaggg aaggagctgt
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tggggcaggg gtgtaaatta tttccttttt ctagtttggc acatgcaggt agttggtgaa
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cagagagaac caggagggta acagaagagg agggacctac tgaacccaga gtcaggaaga
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gatttaacac taaaattcca ctcatgccgg gcgtggtggc acgcgcctgt aatcccagct
                                                                     1680
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acccaggagg ctgaggcagg agaatcgctt gaaccgggga ggtggaggtt gcagtgagct
gagatcacgc cattgtactc cagcctgggc gacaaagcaa gactccatct caaaaaataa
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ataaataaaa aaataaaata aaatggtctg gatttggtca acaccttatt cagtaaatcc
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ttaatttacc ttgagacata caaagacatt cttttaaaga gctattttct tggtattgca
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caaaggttaa ttttaaagca atccaggcaa gtaagctcac aaaaagaagt acattcatct
                                                                     1980
aatccattta gcaaatgttg caaatcagct tccaccaata aaacgtagaa atctgtgaaa
                                                                     2040
ctctatcctt cgtgtcagtt ttaacattgt gttgatggca gccatttcag gcagaggtag
                                                                     2100
ccaagttcca tatatatggg gaaggcaaaa agcagaaaaa cattgcagga gacttagcag
                                                                     2160
ttetetgget tetaatgaet atagageaat ttegaatatg agecatgttt etatgeagaa
                                                                     2220
ttcttctttt atgccttaaa cacaaaagag cttgttgctg ccttgggcag atatactgga
                                                                     2280
attgtcctct ttgagcttac tttctctttt ctctaaggtc aagtaaaaaa tgtgagacgt
                                                                     2340
tttcatatac cacaaaggta atacagcagg ctggagtcac tctaatcaaa ttaggagcaa
                                                                     2400
ttcccttgta aaatccaccg acgccttctt tcctccatgt ctttgtgatt acatctatta
                                                                     2460
caccactgta aaacatgtgt tgatcctgaa gacgagctct tacgacttga tatgggtatg
                                                                     2520
ttgctgcgac agcaaatatt ttggatagtg ctgcaacaga tatatattct actgtgctca
                                                                     2580
actgggcttc tggtaatcta ttgatatgct ggttgtactt caacttcag
                                                                     2629
```

```
<210> 5130
<211> 2389
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (2391)...(1943)
<223> similar to gi5001689 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5130

tttcgtctgt ccgcgttgcc agcaacctgt tttcttttt gaggcccggg ctgcggaggg 60
ggagaagatg gggcgaatgg gagccgctgg attccctgag gacgcggagg gctagccaca 120
gtgtagtccc agacacctt ttcacctgca gcggctggta gtctccgcac cacccgctcc 180
cactcgggtc ttctcccttc ctctgagagc tctgtgggga gtgtgaaacc ggagcgggat 240
ggagctggcc tcctggagac actcatctcc aggaagcagg gcaggccaac ctaattccct 300
```

```
agagggccga agagggaaag gaggggccct atgcttggac aggctcctcg cagctcggtt
                                                                      360
ccactttgtc ctccacagct gagaaggtga gctccctggg caagaactgg caccgcttct
                                                                      420
gcctgaaatg tgagcgctgc cacagcatcc tgtcccctgg cgggcatgca gagcacaatg
                                                                      480
ggaggccata etgecacaag ccatgetatg gggetetett tggacccagg ggecetecee
                                                                      540
atatgaagac attcactggg gagacctcgc tgtgccctgg ctgtggggag cccgtctatt
                                                                      600
ttgctgagaa ggtgatgtca ttaggcagaa attggcaccg accgtgtctg aggtgccagc
                                                                      660
gttgccacaa gaccctgact gctgggagtc atgctgagca tgatggagtc ccctactgcc
                                                                      720
acgtcccctg ctacggctac ctgtttggcc ccaaaggtgt gaacattggc gatgtgggct
                                                                      780
gctacatcta tgacccagtg aagataaaat tcaaatgaga cgctcacaaa aaaggtcacc
                                                                      840
ctaactcagg cctcccatca tgcccctcat ggtccaatgg aagctacaaa aatctccagt
                                                                      900
cccatggggg ttggggaagg tgggatcttg ggggcctggg cctaggetcc atggtaggcc
                                                                      960
agagagteta gaetttetet gecaattttt teeettteee atttetatet ggttagggaa
                                                                     1020
cagcccgttt tgaagggtat cctcctcctg gccatcacaa cccctttccc cagcacattc
                                                                    1080
tggagettea aggtaeteat aaaacttgtg tttattgaat tteageetet gtggettett
                                                                     1140
caataaaatg ttggctcccc atgccttcaa ctcttctttg ggcatgagac ccagtggttt
                                                                     1200
gggaggatgg ggaatgtggg ggttggggat gaacatgcaa ttgccctgca gggtgccctc
                                                                     1260
ggaggtagca gggccagccc atgagaacaa aaagctctgt tctttttgtc ccttgggcct
                                                                     1320
gggcattggc aagtcctaag caccacaca gtggacaagc atgcccacca agccccattg
                                                                     1380
ggtacccaga agteteatat getaagteet ttetttagge acceatetet aggaggaage
                                                                     1440
aggaagcacc ttatttcagg taacttcatt ttgagcatgg caacagatcc tatggtaagg
                                                                     1500
gcctcccaag aggttttcat ttatccattt ggggaggatg aacagactga ggcccagaga
                                                                     1560
agggaaagcc acatgcccaa ggttcacaca gcaagttaat ggtgaaggtt ttatcagagc
                                                                     1620
ccagggdaga ctcagtggct tcctatccag ggctcttccc acagctcgtc accactgccc
                                                                     1680
caacccaagg ggcaccttta tttacagaat cctccccaac cgtgagaggg gtgcccagca
                                                                     1740
gcccactgca ttctgggaag tcaactgttc ctagaagcca aataatcaag gatggatgag
                                                                     1800
cagagggage gggtactgge ageaacteeg geectaggea gagggttega tacteecage
                                                                     1860
ctgagttgca gggcctgccc ttctgctctc ccagcccctg ctgcagagct tctgtggagg
                                                                     1920
gcctgcctcc actcccactt agttctggac ctgcttcatg ggcatctctt cctcctgaag
                                                                     1980
actggttggg geactettte tetecaegte etggatggte tetggeaget gtgeetgeet
                                                                     2040
cgtctctggc agcaggaggg cggtgccggc agccagcagg gcgatccccc cataagtaag
                                                                     2100
ettgggeagt, gaeageeaea etceateeag eaaggeegee agtggggeea aagageeeee
                                                                     2160
cageeggeee accagtgeag teageeceat ecetgtetgt etgageaceg tagggtacaa
                                                                     2220
ctctgaagtg aacaggtagg cagtggtgaa ggcagcttca gaaaaagctt tccccatcac
                                                                     2280
tgccaggaca gtgctccagg acttcatatc ggaggacact agcagtctag tgccgaacgc
                                                                     2340
cagggccgtg cccagcagtg tcccggcttg cgtgaggcgg cgtcctgcg
                                                                     2389
```

```
<210> 5131
<211> 611
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(569)
<223> similar to gi2887453 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5131
actggctgaa aagttttaaa ggtctaaggg agaatacaat tatctgtgcc agtcccaaag 60
agctgcaagg agtaaatgtg atcgatgcag tgaagaacta cagcatctgt ggcaaaagta 120
```

```
180
ctacagagag gtttgatctg gccagggctc tcccaaagcc gacgtttaag cccaagctcc
                                                                      240
ccaggccgaa gcatgagagc aaaccccctt tgcccccgac ggtgggagcc acagagcccg
geccagagae egatgetgae geegageaca tetettteea taaaateate gegggeageg
                                                                      300
tggcgctttt cctgtccgtg ctcgtcatcc tgctggttat ctacgtgtca tggaagcggt
                                                                      360
accetgegag catgaageag etgeageage geteceteat gegaaggeae aggaaaaaga
                                                                      420
aaagacagtc cctaaagcaa atgactccca gcacccagga attttatgta gattataaac
                                                                      480
ccaccaacac ggagaccage gagatgetge tgaatgggac gggaccetge acetataaca
                                                                      540
aatcgggctc cagggagtgt gagatacctt tatcaatgaa tgtgtcaacc tttctggcat
                                                                      600
acgaccagcc g
                                                                      611
```

```
<210> 5132
<211> 1897
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (159)...(481)
<223> similar to gi3924594 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5132
cgtaacgcgt cacgggcggc ctggcagctg gcggcattga ggcggacgcg tctagaggtc
                                                                       60
cgtctgaccg cggcgtcggg acctggtttc cgggcatgag ctgagagcac cacgccgagg
                                                                      120
ccacgagtat ttcatagaca ttgatggaag cagaaaccaa aactcttccc ctggagaatg
                                                                      180
catccatcct ttcagagggc tctctgcagg aaggacaccg attatggatt ggcaacctgg
                                                                      240
accccaaaat taccgaatac cacctcctca agetecteca gaagtttgge aaggtaaage
                                                                      300
agtttgactt cctcttccac aagtcaggtg ctttggaggg acagcctcga ggctactgtt
                                                                      360
ttgttaactt tgaaactaag caggaagcag agcaagccat ccagtgtctc aatggcaagt
                                                                      420
tggccctgtc caagaagctg gtggtgcgat gggcacatgc tcaagtaaag agatatgatc
                                                                      480
ataacaagaa tgataagatt cttccaatca gtctcgagcc atcctcaagc actgagccta
                                                                      540
ctcagtctaa cctaagtgtc actgcaaaga taaaagccat tgaagcaaaa ctgaaaatga
                                                                      600
tggcggaaaa tcctgatgca gagtatccag cagcgcctgt ttattcctac tttaagccac
                                                                      660
cagataaaaa aaggactact ccatattcta gaacagcatg gaaatctcga agatgatggt
                                                                      720
tgtgaattac tgtagcagca aaagcaaatt ggtctccaca cctaaaatcg tctgcctgtg
                                                                      780
tactttgtag atgtgaatgg tactattcaa cggagcacaa tcacatgtta gcatttggta
                                                                      840
acataatgtt tttggatgtt cttatggatg tttcttccct aaactatgta tggaattgag
                                                                      900
catcatccag aataaatagc gttgtatccc aaattgtgat ttgaaccctg ggatgctcta
                                                                      960
attggctggt tggtttggat ttgtaactcc agaaacattc tatagtgttc cagagcaaaa
                                                                     1020
ggcaaataca caaaatatta tttaaatcag gaaactaaaa atattaacat ctattaaaaa
                                                                     1080
attgagcatt tttctacgct cgtgtgtctt ttacaacata aagaaaaagt aaaaggcagg
                                                                     1140
gagggaagtg agagacagat tttaaatcat gttcagaact gttgttccag aatttactac
                                                                     1200
ggcaatccct ccaactggac tgaaaaagag aaagttcttg gcaaaaagga gctgattctt
                                                                     1260
tgaacaaatg ttgtagtaat ctgtttaaga attatgctta ttgtttcaaa atcccaacta
                                                                     1320
ggaaaacatg gtgtatatct taaaattgtt cgtgttgaca aaactagaat caaatttaac
                                                                     1380
attitatace acaacacaag tictattigg aaattgaact titattictat agcaaccatt
                                                                     1440
tttttcaaat ctaaataacc atgccttcta taataacaaa tgttgctatt atcatgggac
                                                                     1500
ttttaaaatt acatttattg catgggattg tttttatagc atgagaatgt tctgtttgga
                                                                     1560
attatatcat ggtcagtcta aatagaaaaa gcaaaatttc tttgaaaacc taaacattgc
                                                                     1620
tatattggtc actatcaaac atacaatttt ctaataattg tgtagcggtc taagtggaag
                                                                     1680
```

```
agattgcatt atcttgtgca ggacgaggag aggacatgca gtgggcacag aaagtcaatg 1740 gaacagatgc cactgtggca ccaagactgt aatgactctg tgtggtaggt agttttaaag 1800 gactgcatgc cttggaaatg attcttcact tggagaacat acttgcctct agatatgttt 1860 gtcactctaa gcatcctgaa tataacaata gagaaag 1897
```

```
<210> 5133
<211> 2219
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (119)...(1132)
<223> similar to gi2894802 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5133

gacagetace tgcattgcca aaagttcaca ttttttgtct agaacacaag atattcatat 60 tttcagacag gtaaccagtc ggggagaggc acatttggag ctgaatgcat ttcgaaggaa 120 gcatgattgt gcactagtca tatctgggga ctctctggag gtttgtctaa agtactacga 180 gcatgaattt gtggagctgg cctgccagtg ccctgccgtg gtttgctgcc gctgctcacc 240 cacccagaag geoegeattg tgacactget geageageae acagggagae geacetgege 300 catcggtgat ggaggaaatg atgtcagcat gattcaggca gcagactgtg ggattgggat 360 tgagggaaag gagggtaaac aggcctcgct ggcggccgac ttctccatca cgcagttccg 420 gcacataggc aggctgctca tggtgcacgg gcggaacagc tacaagaggt cggcggcact 480 eggecagtte gteatgeaca ggggeettat catetecace atgeaggetg tgtttteete 540 agtettetae ttegeateeg teeetttgta teagggette eteatggtgg ggtatgeeae 600 catatacacc atgttcccag tgttcccctt agtgctggac caggacgtga agccagagat 660 ggcgatgctc tacccggagc tgtacaagga cctcaccaag ggaagatcct tgtccttcaa 720 aaccttcctc atctgggttt taataagtat ttaccaaggc ggcatcctca tgtatggggc 780 cctggtgctc ttcgagtctg agttcgtcca cgtggtggcc atctccttca ccgcactgat 840 cctgaccgag ctgctgatgg tggcgctgac cgtccgcacg tggcactggc tgatggtggt 900 ggccgatttc ctcagcttag gctgctacgt gtcctcactc gcttttctca atgaatattt 960 tggtataggc aaagtgtctt ttggagcttt cttaaatgtt gcctttatca ccaccgtgac 1020 cttcctgtgg aaagtgtcgg caatcaccgt ggtcagctgc ctcccgctgt atgtcctcaa 1080 ttacctgagg cgcaagetet etecteccag ctactgcaag etggeeteet aaggggetgt 1140 gcaccccag cgggctggcc ccagcacctt ctgcccttcc cagcaccttg tgcccttgcc 1200 agtgaacgca gggtttgcca ttgctatcaa gcaatcacca caagaaaggg agggtacgcc 1260 aggcgagccc agggcacaga tgctgagaca gcctctcctt ctcagtgcag ggacgtcacc 1320 cctgccaggc aagcccaggg cacagatgcc aggatggctt ctccctctca gtgcgaggct 1380 tcacccctgc caggcaagcc cagggcatag atgctgagac agcctctccc tctcagtgca 1440 gggacgtcac ccctgcccag gcaagcccca gggtcaacaa gaggcgggac ggccctctcc 1500 ctctcagtgt gaggettcac ccatgcctag gcaagececa gggcacagat gcccgggatg 1560 gececetece tectaagtge gggaacgtea ecceetgeee aggeaageee agggeacaga 1620 tgctgcgatg gcctcttcct cttaaagtgt ggggcctccc ccccggcttt tctttctttt 1680 tttgtattgt caaaattgta tttcccatat tgaagcagct tgagtttcta ctgaaaatga 1740 gcccgaatta tttcactatt actgtaaagg gttcatctta ctctggcatt ctgagaatta 1800 gactgaaagt ttaatttetg cagtteeete atatteagat tetttetttg atgttataae 1860 acaaagtcat teetaeteaa atgtaataaa attgaggete caeggaggee egtgteeaca 1920 tcagctgcag ctcccgctca gacagacggc ctgccccaca gcctgccctt tgctgaaaat 1980

```
accetegett tatacttgea tttegetttt cagtaaaaac agteaagtta etgagttete 2040 acataaagag etetteteac acaceetaaa ggeaagttge gtaaacagtg gegttteega 2100 acgeaattee attgeggeea ecaatgtaaa teattgeea gagaetttge tgetageacg 2160 egtgteette ecateettt tetatttgea aaateacact egaacaceat ttetatata 2219
```

```
<210> 5134
<211> 1644
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (740)...(1292)
<223> similar to gi3874826 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5134 gtagecggee egaaagtage gtggaeetge geggggegge eetggegeae ggeegeeaee 60 tgtccagccg ccgcaacgtc ctgcacatcc gcacgatccc tggccacgag ttcctgctgc 120 agtoggacca ogagacagag otgogagoot ggcaccgogo gotgoggact gtcatogago 180 ggctggatcg ggagaacccc ctggagctgc gtctgtcggg ctctggaccc gcggagctga 240 gegeegggga ggaegaagaa gaggagtegg agetggtgte caageegetg etgegeetea 300 gcagccgccg gagctccatt cgggggcccg aaggcaccga gcagaaccgc gtgcgcaaca 360 aactaaageg geteategeg aagagaeege eettacaaag eetgeaggag eggggtetge 420 teegaggtga gggggetggg ceaggtteat ggataagaaa acteeagega ggeteagagt 480 agagettece agaactagae cacaacette tgtgactget gettteceae taccecagat 540 tgtttagggg agaagetggg gtgaeetgta eeeetttgee agattgtttg aageagggga 600 agggaggtgg agtgtatttc cttgcccagg cctggcacag gcagccagga ggaccagcct 660 cacttaagga taaagaccta tgctgagaag agctcctgtg agtgacgctg gcactggctt 720, cccgcctcac tetacttecc cagaccaggt gttcggctgc cagttggaat cactctgcca 780 gcgggaagga gacacggtgc ccagcttttt gcggctctgc attgctgctg tggataaaag 840 aggtctagat gtggatggca tttatcgggt gagcgggaac ttggcagtgg tccagaagct 900 tegetttetg gtggacagag agegtgeggt caceteegat gggaggtatg tgtteceaga 960 acagccagga caagaaggtc ggttagattt ggacagtact gagtgggatg acattcatgt 1020 ggtcaccgga gccctgaagc tttttctccg ggagctgccc cagcctctgg tgccaccact 1080 gctgctgccc catttccgtg ctgcccttgc actctccgaa tcagagcagt gcctctctca 1140 gatacaagaa ttaataggct caatgccaaa gcccaaccat gacactctac ggtacctcct 1200 ggagcattta tgcagggtga tagcacactc agataagaat cgcatgacac cccacaacct 1260 gggaattgtg tttggaccaa ccctgtttcg gccagagcag gagacatctg acccagcagc 1320 ccatgetete tacccaggge agetggteca getgatgete accaacttea ecageetett 1380 eccetgatge agggaaggaa gaagagaaaa catattteeg gteatetetg gtggtgagag 1440 gctggtgttc tgttttgagg atatcccttt aaatctccca aatgactgtc tctatcttca 1500 tgagtgtgac ttgaggtgtt gggatgggtg agggagcttc tctaaagagg aaagtgagtg 1560 gattaacccc tgcttctctt cttgttccct gttatcattc ctccccaaca taataataca 1620 taaagtggca tggtaaaaaa aaaa 1644

```
<210> 5135
<211> 3137
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1177)
<223> similar to gi5911890 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5135 gtggcagcca gatatcgggc catacggagg actgctgaac gtggtggtgg acggcctgtt 60 catcateggg tggatgtace tgcctcccca tgacccccac gtcgatgace ctatgagatt 120 caagcetetg ttcaggatcc acctgatgga gaggaagget gecacagtgg agtgcatgta 180 cggccacaaa gggccccacc acggccacat ccagattgtg aagaaggatg agttctccac 240 caagtgcaac cagacggacc accacaggat gtccggcggg aggcaggagg agtttcggac 300 gtggctgagg gaggaatggg ggcgcacgct ggaggacatc ttccacgagc acatgcagga 360 420 geteateetg atgaagttea tetacaceag teagtaegae aactgeetga eetacegeeg catchacetg cegéceágee geceegaega deteateaag cetggeetet teaaaggtae 480 ctatggcage caeggeetgg agattgtgát geteagette caeggeegge gtgeeagggg 540 caccaagatc acgggcgacc ccaacatccc cgctgggcag cagacagtgg agatcgacct 600 gaggeategg atccagetge eegacetega gaaceagege aacttcaatg ageteteeeg 660 categiectg gaggigegeg agagggigeg ceaggageag eaggaaggeg ggeaegagge 720 780 ggcagaggcg cccagcaagg gcccagatgg gacacctggt gaggatggtg gcgagcctgg 840 ggatgccgta gctgcggccg agcagcctgc ccagtgtggg caggggcagc cgttcgtgct 900 gcccgtgggc gtgagctcca ggaatgagga ctacccccga acctgcagga tgtgttttta 960 tggcacagge ctcategegg gccaeggett caccageect gaaegeacee eeggggtett 1020 catectette gatgaggace gettegggtt egtetggetg gagetgaaat cetteageet 1080 gtacageegg gtecaggeea cetteeggaa egeagatgeg eegteeeeac aggeettega 1140 tgagatgete aagaacatte agteeeteac eteetgaeeg geeacateet tgeegeeaca 1200 tecegggtgg etetgggget etgaactetg acetgtgaat agaagcagca tgcactttgg 1260 aaateeggee ttttgaeeag aaegeaeaee tegteggggg geeeagteea geeaeeeeee 1320 agcactttat gtagagaggg tgacatagac ctgcatattt gtcagtgcca tgatggaaga 1380 agctgagcat gtcttaccaa aaacagagag aacgagcctg gatacagcag atgtagggga 1440 cagccgtggg accgcgtgag aattgaagcg gtggggttcc cgcaccctgg gctggctggt 1500 ggttttctcg ggaagcagga ccctcctgac tggtgctctt cctgtgagcg gatagagtga 1560 tagactgggt cgtgtgtgag acgcatgtgc tccaccccac tccttttggg ggaagccagg 1620 caacagtggc ctctgggagg gggtcaggaa gaggcgaaca gctcaggcag cgcaggtgtg 1680 atgggcacag tacgcaaagc aagctcggga agttggtagg atctcaggct tggggccggg 1740 actotggagt gaatococat ttototacog gottgottgg agtttggaca gaagcattto 1800 acctetgate teagetteec cacetgtgga gtgggtttag tgacetgagt cactagggaa 1860 tgtcacctga atgcacagcc cagcccatgc acctgcccca gcccctccag ctttggagcc 1920 aaggccatcg ttccagccac ttgactgtcc tcgacggcct gttccagaca gggcgtttgt 1980 tttgtecatg cettectece tgcacgcaca eggegteaaa accaagetge eggecactgt 2040 ctccagaacg caaggctcca ggcccgtgtg tctgaagcag tgagtggtcc acacaggtgc 2100 caggagtgcc catatgagat gacgaggaaa cccctttgca ggtgagggga cagctttcta 2160 gaaaagccac acctgcatct ggggacacac tttggaaagt gggaccctcc agcctggaga 2220 ccccatggac tgatgcctcc actgctgtgt gccccatgtt gtgttaacac ctgcgtgtgg 2280 ggaccccatc tgaggtcttg gctgaggttg gcatctcctg aagaacagag agcacggtgt 2340 ccagagetgg ccettecece ageccacage cageteegtg ceegagtggg egtececage 2400 gageetteee tetetgeege ttgteettgt gtetgggetg etecaagtee ttgtgetggg 2460 caccetggae acgtectget ggtgagggae ctcgggaagg tgacagtetg tgtgcettgg 2520

```
tgtggagacc aacctgagga tgtcctggga aatgttttcc tgatgaattt ctccttgact
                                                                     2580
ggcctttaaa gaacataaga attcccattg cccagcctca gtgcatttgg caaatgctta
                                                                     2640
                                                                     2700
ctttgcttcc cagagtcaga gaattggcaa aggttcctaa atggtaatct ggccggcctg
ggagaaagac tcacgagaaa agccagtgga gaaagcgccc ttccagggcg gcagcagcgg
                                                                     2760
gagecaegea gaeceegagg egeacetget ggetettgtg tgtggcecea gtttetageg
                                                                     2820
gettttgeag cattageeta caagetttgt cacteeetge cetetgtggt ggtcaetgtt
                                                                     2880
tttctctctt gccaaatgag gcagtctctg agtgacggtg actgtggcct tgaagcctgg
                                                                     2940
                                                                     3000
aggactgttg ggcatgtaga ctggcacctt gaagattcac cattgtttaa ataaaatcaa
                                                                     3060
gcaaatgett ttttaccaag agcccgagce tegetetaag ggacgcagte ctagaggcgt
gccctttggg gcttgaagag cacactgtgg gacgcacgtg cttctgatta aaggaatctc
                                                                     3120
agatctcaaa aaaaaaa
                                                                     3137
```

```
<210> 5136
<211> 5330
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(2185)
<223> similar to gi3327078 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5136 .
cgccgcgggg accgggcagg gctccccgtc ggagtgcact gcgccggaca cttcaagccc
                                                                    60
tggagggaca ggaaagccag aaatggactt cgtgagactc gctcgactgt tcgccagggc
                                                                   120
ecgccccatg ggactgttca tectgcaaca cetggacece tgtagageca ggtgggcagg
                                                                   180
aggcagggag gggctgatgc ggccaatgtg ggcgcccttc agcagctcct cctctcagct
                                                                   240
geceetegge caggagegte aggaaaacae gggeageetg ggetetgaee egageeaete
                                                                   300
caactccacg gccacgcagg aagaagacga ggaggaggag gagagttttg ggaccctctc
                                                                   360
tgacaaatac teeteeegga gactatteeg caaateegea geeeagttee ataacetgeg
                                                                   420
gtttggggaa cggagagatg agcaaatgga accggagccc aaattatggc gaggccggag
                                                                   480
aaacaccccg tactggtact tettgcagtg caaacacctg atcaaggaag ggaagctggt
                                                                   540
tgaageeetg gacetgtttg agaggeagat getgaaggag gagegattge ageeeatgga
                                                                   600
gagcaactac acggtgctga ttgggggctg cgggcgggtt ggctacctga agaaggcctt
                                                                   660
caacetetae aaceagatga aaaageggga eetggageee teggaegeea eetacaegge
                                                                   720
cctgttcaac gtctgtgccg agtccccctg gaaggactca gctctacaga gcgccctgaa
                                                                   780
gctccggcag cagctgcagg ccaaaaactt cgagctcaac ttgaaaacat accacgcgct
                                                                   840
gctgaagatg gctgccaagt gcgcagacct taggatgtgc ctcgatgtgt tcaaggaaat
                                                                   900
catccacaaa gggcacgtgg tcacagagga gaccttcagt ttcctgctca tgggctgcat
                                                                   960
ccaagacaag aagacagget teeggtaege eeteeaggtg tggeggetga tgetgagtet
                                                                  1020
agggetacag eegageeggg acagetacaa eetgetgttg gtggeagete gggaetgtgg
                                                                  1080
cctaggggac ccccaggtgg cctcagagct gcttctgaag cccagggagg aggcgactgt
                                                                  1140
1200
cctcatgtca gccatgctgc atgtggaggc cctggagagg cagctgtttc tggaaccttc
                                                                  1260
traggicant gggcctrcag agcctrcgga agccagagtg crcggraagg crcaarcaga
                                                                  1320
ggtggatact aaggcagagc ccagccacac agcagccctc accgcagtgg ccctgaagcc
                                                                  1380
acctcccgtg gagctggaag tcaacctcct gacccccggg gccgttcccc ctacagtggt
                                                                  1440
ctcctttgga acggtgacca ccccagctga ccggctggcc ttgatagggg gcctggaggg
                                                                  1500
cttcctgagc aagatggcag agcacaggca gcagcccgac atcaggaccc tcacgctact
                                                                  1560
```

```
ggccgaggtg gtggagtccg ggagtcctgc agagtccttg ctgctggccc tcctggatga
                                                                    1620
gcaccaggta gaggccgacc tgacattctt taacacgctg gtgagaaaga agagcaagct
                                                                    1680
gggagacetg gagggggcca aggcgctgtt gccggtcctg gcaaagaggg gcctcgtccc
                                                                    1740
caacctgcag acattctgca acctggccat cgggtgccac aggccgaagg acggtctaca
                                                                    1800
getteteaca gacatgaaga agteecaggt gaceeccaac acteacatet acagtgeeet
                                                                    1860
catcaacgcg gccatcagga agctgaacta cacctatctc atcagcatct tgaaggacat
                                                                    1920
gaagcagaac agggtcccgg tgaacgaagt ggtcatccgc cagctggagt ttgcagccca
                                                                    1980
gtaccetece acetttgace ggtaceaagg gaagaacace tacetggaga agattgacgg
                                                                    2040
cttccgagcc tattacaagc agtggctgac agtgatgccc gcagaggaaa ccccqcaccc
                                                                    2100
ctggcagaag ttccggacca agccccaggg ggaccaggac accggcaagg aggctgatga
                                                                    2160
eggatgtgee ettgggggea ggtgatggga geacagetgg aacaatgtge teggeeceea
                                                                    2220
gtgctctgtg ggagccccag gacaagtgag ctggtgtcac ctcctgcctg ggggaagagc
                                                                    2280
caggccctga ggaacagccg cagcgtgtca caggtgttgg tgaggacaca cactaggccc
                                                                    2340
aaggtgcctg tgctcccagc aggtccaagt gcagctccag ccacctttgc gtgtcacctt
                                                                    2400
cacgggactt ccagetccag ctacettigt gtgtcacete acacaccaca agggggetgg
                                                                    2460
ggcatctggt ccctggggcc tgggccgccc cgccgggttc cataggccga tgctctgaaa
                                                                    2520
2580
cagegaagee tteeceatag agacegtget ceaacteggg cetggggeac tgetegetge
                                                                    2640
teccaggaag ggggtggegt gacaggeagg aacetgegaa gtecagagte cagggtggag
                                                                    2700
egegecagee teagecagag cagecaegae agecaeagtg tgtgeaeteg atgatgegge
                                                                    2760
cctgcaacgg aggaggacag tgagacgatg ccactgcgcc acgctcgccc ctgcacactc
                                                                    2820
acatatgtgg caacceteee aegaaggade tgecaccatg ceatataggg acacacetea
                                                                    2880
gaaaccette ettgacaget etggacaggg aaaatttgge teeeteatga aggtagaace
                                                                    2940
agetgetgtt gacacegagg ttacatetgt atgtetattt ataatatgtt etgeaaatee
                                                                    3000
aacacacgtt tgccaatcaa gaaaaaaaaa teggtgtgaa tgagtetegt tattetgeta
                                                                    3060
agtgagcatg acagaccetg cgatgagcag acgtggetet getactgitt ggggaettea
                                                                    3120
ggggggcctc tgggctggta cactctggtg ggggaagagg gcaggagact atgcacttga
                                                                    3180
gtcacaccct totggcccag agccccccag aaagaagggt ottgtccccc aggcctggtg
                                                                    3240
eggeceaaca ettggecage cagaaageee tagaacagtg gettgtgttt attttaettt
                                                                    3300
ttcaagttct ttttttggaa gaacaagacc atagtttaag taaacaggat cctctggtga
                                                                    3360
aacccaggta agtctacagc gggctgtttt ggccacaggg ctgaagcagc accccagccc
                                                                    3420
accageceet gaeetggaet eettgtggaa tetgggeaet eagaggaagg gggettetge
                                                                    3480
cactetgeca cetgtecetg cetecateag aaaaceaaca ceceagtett cegtegggga
                                                                    3540
ggcggccctt gctcgccccc actgctcagt acccaagtcc tcagcatcca gccacagctc
                                                                    3600
tccattgtca gtctcactgc agcataaagg ggactcatgt gaagaggccc ctgtgtggag
                                                                    3660
ctggggaaaa gaaggccagg ctggcagatg ggcggtgggg ccaacaactg tgctgagggg
                                                                    3720
ctgcactgag cggccactgc tgtgactctg cctcgggcca cagctgcctt tcagaggggc
                                                                    3780
ttggaacegg atggagetea geteetgtee eteageacea eteetgagge geetggeeta
                                                                    3840
ggagtggtac ttggaacaga aagttctgaa agaagaaaca cagtgggctg ggcgcagtag
                                                                    3900
ctcatgcctg taatcccggc actttgggag gctgaggcgg gtggatcacc tgaggtcggg
                                                                    3960
agttcgagac cagcctgagc aacattgaga aaccccgtct ctactaaaaa tacaaaatta
                                                                    4020
gccaggcgtg gtggtgcatg cctgtagtcc cagctactca ggaggatgag gcaggagaac
                                                                    4080
cgcttgaacc cgggaggtgg aggttgcagt gagccaagat ggcatcactg cactccagcc
                                                                    4140 🗸
tgggcgacaa agcaagactc cgtcttgggg gggcgggaaa gatagtgatg gtaatgttaa
                                                                    4200
agtatcactg tgaggactga aagggacagg aactcactgg ttgtccttcc ctgatgtcac
                                                                    4260
cctgccacca ccttgggatt agggctcccc accaccattt cctaagtgag gaaaggggtt
                                                                    4320
cagtaatttg cccaaaagtg gagttgagat tgaccccaga cctaacaaac acacagccac
                                                                    4380
acgctgcctc acatggattc ctgaatacag ggacccactc ccacgaggga gagccagcag
                                                                    4440
gacatccagg gacaaaacga cattccagcc caaccaaata acataagatc ccttgcagtc
                                                                    4500
gactaaggca gaattttgag ctgaaaacaa caccaagctt gagtgtcaga cattaccact
                                                                    4560
tecagettge ttttgggeac geggeagatg cagttegtee egaagttggt gteeegtgte
                                                                    4620
tgaatgcacc gcaggcagca caagttctca tatccttgct ttttccattt tgcaatcagg
                                                                    4680
tttttgtctg catagccttc tttaatacaa tattcataga gttctctgct gatggctttc
                                                                    4740
cgcttgtaaa agaggtgcga agatgtagcc ggggttttct gggtgggtgg atccctgaaa
                                                                    4800
gatgggccac agagattcca ctttccttct teetttcatg eggttetgtt teagettete
                                                                    4860
tcatcttttg atctaattca tccagtgttg gctcaatcaa ctccccagcc catctggggg
                                                                    4920
tggctttccg gcttcttttg actttaggca ttctccttcc acagataatc tgcaaagatc
                                                                    4980
```

```
ttaggatgtg ctttccaaga gtatagacag cagaaagatc tctcgtctct gcagttgcag 5040 ttgcaggctt ggattcttgt tcagctctaa aaaaattatt cagtgacttt caggtcacct 5100 tccctctctg gttctgtttc ttcagaggaa acggcgcgag aatcctagag gaaaaacccc 5160 caaatctacc gtcccctcag aagaacgaac gtgcgccgcc tcctctcggg agctctctcc ggcctcaagg tccaaagccc gaacacatcc cagtggctgg ctgagagtcc agccactcat 5280 atctccctcc aggacggtgc agaccaccgg tctcccgcct cagggaattc 5330
```

```
<210> 5137
<211> 720
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (527)...(215)
<223> similar to gi2477514 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5137
tttttcccaa agggattaaa ttggggaccc cccgggtttt ccccccccc ccgttttaaa
                                                                      60
aacceggeee eggaatttaa ttttggggee ecaaaaaaa aattttaeet teeceaeeee
                                                                     120
cgggaataaa aattggtccc ctaaaaaggc ccccccttt ttttttttt ggagctgggg
                                                                     180
gatgtttact ggtgtggggg gacctgggaa catcactgtc gttcgtacat ctctcgtagg
                                                                     240
atcttcatgc tttctgagta acgaagetgg ttccgatgag aggectectt ccacctctgg
                                                                     300
eggatgegtt tecagegetg catgttgega tagatgagtg tggagggtga gggeteggge
                                                                     360
teagaggget categteagg ggtgeeetge ateteagget geagtggaga tgggatgegg
                                                                     420 '
gatetgeagg cateteeggg tggeeeeggg ggtgtgggtg geggeagett gtacacatea
                                                                     480
egactettge tgttggttac etetgagece tggggacaca agggeeccat gecaggeeca
                                                                     540
agagagtcaa agcagagggg ctgggaatcc acattcatcc ctcctgcctt tcccagcaac
                                                                     600
aaatggcatg aggggctcgc taagggactc agacaggagg catgtatgaa gggcagacac
                                                                     660
ctcaaccage cagegggtca agtgtgcctg ccccagggac ccctgtcttc tectatecag
                                                                     720
```

```
<210> 5138
<211> 1034
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20)...(583)
<223> similar to gi6002805 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5138
                                                                       60
gaagtgeggg gaattegeag gggeteteat tgetgaette ttgtetggee tggtaeaetg
                                                                      120
gggtgctgac acatggggct ctgtggagct gcccattgtg gggaaggctt tcatccgacc
                                                                      180
cttccgggag caccacattg acccgacage tatcacacgg cacgacttca tcgagaccaa
                                                                      240
eggggacaac tgeetggtga caetgetgee getgetaaac atggeetaca agtteegcae
                                                                      300
ccacagecet gaagecetgg ageagetata eccetgggag tgettegtet tetgeetgat
catcttcggc accttcacca accagatcca caagtggtcg cacacgtact ttgggctgcc
                                                                      360
acgctgggtc accetectge aggactggca tgtcatectg ccacgtaaac accategcat
                                                                      420
ccaccacgte teaccecacg agacetactt etgeateace acaggetgge teaactacee
                                                                      480
tetggagaag ataggettet ggegaegeet ggaggaeete ateeagggee tgaegggega
                                                                      540
gaagectegg geagatgaca tgaaatggge ceagaagate aaataactte teegageetg
                                                                      600
ctacctggtt gccaaccttc cctagccccc aaaccgaagc catctgccaa attccagcct
                                                                      660
ctttgagctg gcccctccag atggagagga catctcctgg gctgggccca ggtaccccag
                                                                      720
                                                                      780
cccacccctc atgacacaga atacttgagc cactgatttt tcatttcttt ttttttttt
tettgggece ttettaacce eetggggtgg tttttttgga aacetggatt ttgccaccet
                                                                      840
ccctgggaaa aaggggggtt aacccattcc ttgacccctg gcggcccttg ccccgtgggg
                                                                      900
aaccetttaa ggggggttge etttgggeee aaaaattgee etttteett etttgttgge
                                                                      960
ccccaggggt tgggggagcc cccaggcccc cttaagggtg ggggagcttt gttttgccac
                                                                     1020
accettgett atge
                                                                     1034
```

```
<210> 5139
<211> 997
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (985)...(582)
<223> similar to gi4062856 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5139
cgttctctcc tgcagggaaa gctcacaact cctcacagcg atctggtatc ttgagcgtca
                                                                       60
gtttctggcc gaaactgggg gctcctgact gaactccctc ccacctagaa aaccttctgt
                                                                      120
gcagtctgat tgctccaaca cccacagagc aggattcagg tatcccggag accttgggag
                                                                      180
gtccccatcc agaggtctgc tgtcctgcca ggcttggggc agcagggact gggaccccac
                                                                      240
tcagacctct ctggggcaaa tgttttggtt ctcacaacag ccctagtgaa atcaatccta
                                                                      300
gatacteeca tttggteeca ecaaggeeat ttaatttete tgtaaagggt aagatgaeae
                                                                      360
aaaagagcca actatggaaa cggtgaggtg ggagtctgaa ccgatttagc tgttctcagg
                                                                      420
gegeacaggg tgttgaeggt ggtttteate tgeeacetge etecttgaga eecagetgge
                                                                      480
ctgagtgtgc acgaaatggg accttctcct tgggtccacc aggctgggag gcacccctag
                                                                      540
gtaccegget ceteateaca geggeagece teteggttee acatetggtt eteetgaega
                                                                      600
agccgctggt tttcggtccg gagcctctgg acctcggcag ccagctcctc cacctggcgg
                                                                      660
caggactgct ggccggtgca cgcctgcagc tgctgcagcc tcctagtctc ctcctccgcc
                                                                      720
tgcgacagec gettetecag etceaggtag tetegeacea geteetgett getgeggeee
                                                                      780
tgcaggctct cggtgtggaa gcgttcgtaa gtctcagaga agtccttccg ctggaactca
                                                                      840
ccgtgcgctc ggccccgccc atcactgtcc ccggcctcac tctccccact ggaacctggg
                                                                      900
tgggagatee catggggeae atceaagttg ggeteeteeg ggteeetgte atteateagg
                                                                      960
aactgggtgg tgttgtaggg aattccacca cactgga
                                                                      997
```

```
<210> 5140
<211> 2742
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3) ... (1005)
<223> similar to gi1928886 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5140
taaaatatag tggcgtgcat tttaattctc agtccatagc tcctaccata gaacagattg
                                                                       60
accagtettt tggegeaace cateetggag tgtacaacte egetgageag etetteeate
                                                                      120
tcaacttcag aggactgict ttctcttttc agttagactc atggactgag gctccaaagt
                                                                      180
atgageceaa ttttgeeeat ggeetggett eteteeagat acceeatgga geaactgtaa
                                                                      240
aacgaatgta catctacagt ggcaacagcc tgcaggatac caaggctccc atgatgcctc
                                                                      300
                                                                      360
tgagctgttt cctgggcaat gtctatgctg agagtgtaga tgttcttcga gatggaactg
gacctgcagg tttacgactt cgcctacttg ctgcaggttg tggacctggc ctattagcag
                                                                      420
atgccaagat gcgggtattt gaacgttcag tgtattttgg tgattcctgc caagatgttc
                                                                      480
ttagcatgct tggctctcca cacaaagtct tctataaatc agaagacaag atgaaaattc
                                                                      540
atteteette ceeteataaa caagtteeat egaagtgtaa tgactaettt tttaactaet
                                                                      600
tcactcttgg agtggacatc ctctttgatg cgaatacaca caaagtgaag aagtttgttc
                                                                      660
tacacaccaa ttaccctggg cattataatt tcaacattta tcatcgctgt gagttcaaga
                                                                      720
teccaetage cataaagaaa gaaaaegeag atggteagae agaaacatge aegaeetaca
                                                                      780
gcaagtggga caacatccag gagctcctgg gccaccctgt ggagaagcct gttgtcctgc
                                                                      840
acaggtette etececaaac aacaccaace catttggtte cacattetge tttggtette
                                                                      900
agegaatgat ctttgaggtc atgcagaaca accacattgc ctcggtgacc ctgtatggcc
                                                                      960
ccccaggcc tggtagccac ctgagaacag cggaactccc ctagggacac caccacccat
                                                                     1020
geceetetgt ecegtggaac tgtgeateac atcetgetea gtgggeetet gtaceaceet
                                                                     1080
gtgggttttc ttggacacct ggccagtgct gaagggctgt tgtgatgttc tgaggttggg
                                                                     1140
ctcaggctgg gtgctctgcc atgggctgag tggcccagat attcttctgt ccatctttgg
                                                                     1200
cctgctggtg ccagcagggg acacagactg caaagagaag cacaaagttt gagccttgat
                                                                     1260
tectggacee aggagetete aactaacaag gaggeaggag aggteaacee ttgteceatg
                                                                     1320
cacattggga agacttgggg ctctttctgt gactgaggac acaggcaccc aggataagga
                                                                     1380
caaggteetg cetttggete cacattgeca catgaceett aaggeaagea ggtagegtgt
                                                                     1440
ccatagiact tggttgcgac atttgcacta catccacttt agttacttga tgagctggct
                                                                     1500
gtggccaggg tggcccacct gcccttccct gttcctttct tgcacgcgct ccctgcctgg
                                                                     1560
gcacaccaaa ctggttgaaa cacagettte taccatecag gtacatgeec aggeetggtt
                                                                     1620
etcacecety ttggagtcag etttcaagat tgeetgtgee eetgetetge eecateetgg
                                                                     1680
ctggcagggc tgcatgtttc catcctgttt gcctctttta tttaatgcca aagttttagc
                                                                     1740
caaagacatc ttcctacttt tgttgtgttt cagcattctg ttctgcactg tgggctggct
                                                                     1800
ctctgcccca accctgggca ctggcccctg gctgggccat ttcatggctc aaagcctctg
                                                                     1860
ggggeteaag gaaggetggg etgeteagte eetteatggg tettgetaat ggaaagtage
                                                                     1920
atatatgtgc tttaaaaata ttaatccttt tgaaaagaac tgagaagaaa aatgtataat
                                                                     1980
tttatcccat ttttaatatt ttggtctagc aacttgtgat acatagatga caattttgtg
                                                                     2040
agtttttcaa atgtgtgtac agatttttgt aaatatgact cttttgtaat taactcatgt
                                                                     2100
acageeteat eetgtatagt ttaatgatga atgtgeaggg gaeetgtete aggeteetat
                                                                     2160
atggttcctg ggccttatag ccaggtttgt gtggcgctcc cgacttttgt gactgactgg
                                                                     2220
tgtcttccca tttggactgt ggcctggcca gagccccttg catatcccca ctgtcagggg
                                                                     2280
```

```
cagccaggac tgttcccatc ctcctggaat gggggaacct tccttatccc ctgcccacat 2340 cccctctcca ataaagcacc tgtgccctca gcaatggcct gccatgtgct gttgctggga 2400 tgtttgtatt aaggtaagtg tgggtattgg ttttgcgccg ggtcccgcgg cgccaggaac 2460 tccaggagat ttcccacgtt cacgaacaca tctgcgtcgc ccttaaaaac gaagcgcacg 2520 tcggggcaga aagctgaggc ccaggctaga aagtggatct ccttgagcgt taggttaaaa 2580 aaggtgtcgt cgaaggccca gagcaggatg tccgcatacg caaggctctc ggcccgcagc 2640 agggcgcgcc agtgggttcg cgcgccctcc ccaacttcgt cggcctcggg gatgtagtac 2700 ttgatagccc gcgtgcggat gggccgcgca tgcacaatta cg 2340
```

```
<210> 5141
<211> 2867
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2868)...(847)
<223> similar to gi556299 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<400> 5141 ttttttttt ttaaaaatat tcagaaccaa gttttatttt gtagtcgtta cacaggaggg 60 ggcagtcaga agagtacagc tcacccccag cagtggaggg gttaaatctc agggacaacg 120 tggggcagtg gggacagcac ctccgaccct atggggtgta ccttcaagta gcaaggctga 180 caatgatgtc tagaaaggtc tccacttctg cctgagtttt gccaaaccca gtggtctata 240 gggatgtggc aaaagaatga cctaccgcag tgtgattatc agtgtttttt aaaataaaga 300 gcacagtttt gcctttaaaa taattcacat caacggtatt tgggagaaca tggagctggc 360 ataacattgg cgtagaaagc agggccaggc ccacccacgg ggccctcgtg tggggacggg 420 tgcctgagcc cctgagcccc tcgagcctct ggccacggct ggctgcctgt gtgctgttgt / 480 ctcgtctgtc ccaccccgag aagggagttg aacaatgtga gttgtctgtg gcattggaaa 540 gtgcagtggt tacatgggtg tgtgcgaagt ggttagctgt gccttcaggc ggtgcgtcta 600 geagggetga tgggggeeag ggetgeteet ggetttttgt gggeaggget tgeeeteeag 660 ggaccccgag tgcttgcacc cgctcggtga cagtggctgg caggtctaag tgctgctgct 720 ggatgcaaat teetttggta gaettttttt tttttaagaa aaaaataaaa ccaatttttg 780 ggttggcacc tgaggtaata agttaagaat aagcaccaaa atggcccttc ctggcacgcg 840 ccggctcaca ggttcttcat gcacacctgg cagcggctga tgtgtgtgcg gatgaggccg 900 geettgageg tgteggegga gggegageee tggaagetet getegggaat ggtggteage 960 cagaagetgt acttgttgge gtagtagtgg caggtgccgc ggcctccatt gcattcgatg 1020 aatggtgtgg cgcggaagtc ctctagacag ctgcccggtg acaccagtga ttggccaccg 1080 cettegtete eegeegeegt gtgeatgagg aaggaatate egateeacaa aeteegeeac 1140 ccagctgggc agtgtgggat ggagacatcc tgactgtgga ccgcgatggc gatggccggg 1200 geeteacae cagaacageg getgatgtag ggettgatet egteetegge caegggeate 1260 atgggcagcg gcgcagtggt agagagccag taggacttgt cgttccggct ggcatagtag 1320 cagacateae cagggttgea gtacaggaag ggcatggtge tgaacegege caggeaggag 1380 ecegocaged chaggiests gittgigeged tictectiggs collegaagta cagbaggets 1440 tatccactcc agagtttgtt catgcccacc gggcacatgg gctcctggtc cgtctggctg 1500 tgcttcacca ggaggtagec gatgetgacg etgeggeetg geataceegg caggeeggg 1560 ctccctggac ggcctggtgc accttcttgg ccaatcggcc cctggtggcc tatgggtcct 1620 teateteece ggaageeggg aacageagae acaceaeete tteettgggg cecagettte 1680 cctggagccc cacgaaaacc tggttctccg ggggggccct ggggccccat ctcccccggt 1740

```
1800
gccccagggg ggcctcgcct cccctgggga cccactgtcc ctggttggac ggcaatcttc
tgggggattc ctgcaatccc gggggctccc acagtcccgg gggcaccagg gaatcctggg
                                                                     1860
tetecettgg gteeettggg geetetgteg eccaeegeee eggtgggtee agtgtteeee
                                                                     1920
atgaageett gtteaceett gggeeetttt teteetggga gaecaaacae accaggeetg
                                                                     1980
ccctggggcc cggagtcccc ggcccatcct ttggtccctg gggttcctgg agctcctggg
                                                                     2040
ttccctgtgt cacctttgct tccaggaaga gcagcagaac ctggtggccc tggtgggccc
                                                                     2100
cgataacctt tcaggccaaa tatccctggc gcccctttgt caccaggtgc cccagagatg
                                                                     2160
ttggaagggg gtgtgatgcc tgggaacccc tgaagtcctg ggctcccagg tgggcctcgt
                                                                     2220
teccetggag etecttggte teetttetgt eetgggaete eeacagggee tggaagggtg
                                                                     2280
ttggcctctc ctgggtcacc tctttcccca ggagggcctg ggaagcctgg gtctccgtgg
                                                                     2340
atgtcagaac ctggggatcc tggaaagccc ttggtgcctg gcaagccgtg taagccgcgg
                                                                     2400
atcccacgga gtcccggaaa acctggtaag cccggagete ccggccagec atcatetect
                                                                     2460
ttgccaccag gcagtccaat ccgccccagc tetecetgcg accetggagg cccagtcage
                                                                     2520
cctggaaagc ctgtttgtcc tttaagtcca ggagggcctt ggactccagt cacgcctgtt
                                                                     2580
atcccaggga agccgatgtc accttctgtt cccttctctc caaagaatcc cttcagacct
                                                                     2640
ggtattccag tggtgccccg ctcccccttc aggcctggtc ttcctggtaa atttatagtg
                                                                     2700
teccegatgt cacegaaate accagtegeg ceaatetege catacaggee tgetetecet
                                                                     2760
ggggcacett tgtcaceceg getteetatg aateetggga ateeegtaat teeagggggg
                                                                     2820
ccagccaccc cagggaatcc tggcaaaccg gggatgccgg ggaggcc
                                                                     2867
```

```
<210> 5142
<211> 3005
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(1096)
<223> similar to gi2827495 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5142
gtccatcttc caccgeggcc acgagegett cegcattgcc agegectgcc tggacgaget
                                                                       60
gagetgegag tteetgetgg etggggeegg aggggeeggg geggggeeg egeeeggaee
                                                                      120
gcatetecee ceaegggggt eggtgeetgg ggateetgte egeateeaet geaacateae
                                                                      180
ggagtcatac cetgetgtgc ecceeatetg gteggtggag tetgatgace etaacttgge
                                                                      240
tgctgtcttg gagaggctgg tggacataaa gaaagggaat actctgctat tgcagcatct
                                                                      300
gaagaggatc atctccgacc tgtgtaaact ctataacctc cctcagcatc cagatgtgga
                                                                      360
gatgetggat caaccettge cagcagagea gtgcacacag gaagacgtgt ettcagaaga
                                                                      420
tgaagatgag gagatgcctg aggacacaga agacttagat cactatgaaa tgaaagagga
                                                                      480
agagccagct gagggcaaga aatctgaaga tgatggcatt ggaaaagaaa acttggccat
                                                                      540
cctagagaaa attaaaaaga accagaggca agattactta aatggtgcag tgtctggctc
                                                                      600
ggtgcaggcc actgaccggc tgatgaagga gctcagggat atataccgat cacagagttt
                                                                     660
caaaggcgga aactatgcag tcgaactcgt gaatgacagt ctgtatgatt ggaatgtcaa
                                                                      720
actecteaaa gttgaceagg acagegettt geacaaegat etecagatee teaaagagaa
                                                                      780
agaaggagcc gacttcattc tacttaactt ttcctttaaa gataactttc cctttgaccc
                                                                      840
accatttgtc agggttgtgt ctccagtcct ctctggaggg tatgttctgg gcggaggggc
                                                                      900
catctgcatg gaacttctca ccaaacaggg ctggagcagt gcctactcca tagagtcagt
                                                                      960
gatcatgcag atcagtgcca cactggtgaa ggggaaagca cgagtgcagt ttggagccaa
                                                                     1020
caaateteaa tacagtetga caagageaca geagteetae aagteettgg tgeagateea
                                                                     1080
```

```
cgaaaaaaac ggctggtaca cacccccaaa agaagacggc taaccctgga gtatcaccct
                                                                     1140
                                                                     1200
tectecetee ecaggeacea etggaceaat tacetttgaa tgetgtattt ggateteacg
                                                                     1260
ctgcctctgt ggttccctcc ctcatttttc ctggacgtga tagctctgcc tattgcagga
                                                                     1320
caatgatggc tattctaaac gctaaggaaa aaaaacaaac acagaactgt ttcaagtact
caagactgac ttacagacca accaaccacc ttgctggaac ccttgctagc aggcattctt
                                                                     1380
ataaaagaaa ctttcgagcc tccttatatt gctggaaact cagctgtgct ccagactaga
                                                                     1440
geeteettae etatgetatg gatttttaat ttattttete ttattteatg tacactgett
                                                                     1500
tttttggtta cagtgtatga tggatgtgta tgaaaaaaat gtatctttgg gaaaacaatt
                                                                     1560
acagtttgtt aatttgaaga tgctggtctt gactcatctt tatttttatt cgcacatccc
                                                                     1620
                                                                     1680
accecatece etgaactact tgggaggtgg gaggggtace agtecacett tgettttggt
agagatgaga ggccgcattt tgctgctaaa gcaagagaaa cttggagctg aagcacacac
                                                                     1740
ctggtctgcc cctagatttc tcctcaaggc ctctggagca accagcacct gcccccttgg
                                                                     1800
                                                                     1860
aatgcagage etggeetgee aaactacaat gtggtagget gaaacgatgg tgttaattet
taggactact tttctagtca cagatgtttt caaatttcta agaaaaagaa aatgaggctc
                                                                     1920
                                                                     1980
aagaggetge ttegtagaat teettttgaa tgaattgagt ggggatgggg acacagtete
                                                                     2040
caagtgtgta tgtggtcttt tctgatctca gctgtgtggc tgcaactctt cgctgttcat
tggttcctct cctggaaagt ggcttctaac cagcactgga tggtgatcat tggtaagctt
                                                                     2100
                                                                     2160
tgctcacctc cctctcttt gcttcatttg gctttatcaa aaagaacaga cctagctctg
                                                                     2220
aatttgtttg gcttgggaaa ttatggattc tttcaagcca ctcccacaag gtgggtccta
ctagaaaggg ttagcatttt aaggggggtt gttctataca cctgtgtcct taccccaggc
                                                                     2280
                                                                     2340
traggaactg cragggaggg aagatgaggt ggggagtctg tactgagatg gaactgtcag
                                                                     2400
tgctgtgttg tatgtacttg ctgttgtaaa agtttgggca tgactttgca tctagcgggt
getgeetgea tetetttgte tgtaagettg etetgggaet eageetetta ggaeetaega
                                                                     2460
                                                                     2520
tgccagcagc tctcattaac agtgaaatga cagaggccaa agatggccaa gtgaagaccc
                                                                     2580
aagtotoaga aaacccagac ttgggacaac tgcctgggaa ctaggatgct agagcagttc
tgtaatgett tgagacacag caattttcac attggccatt ctttcccctc ccctaccccc
                                                                     2640
ttttcttttg agggactttt aatgtttgct gctttaggtg gatggagagt ccaccaggtc
                                                                     2700
ccactcaatt getgetetaa acttetacec acacccacet taattaaggg gtgetaataa
                                                                     2760
aacatgctga ggttgagata aagacgggac ataaggggaa aaattcattc catagagctg
                                                                     2820
aaatctggtt ttcaaggect ctgtggettt cttctgaact taccaccage cctggctgga
                                                                     2880
                                                                     2940
atgtagattg tgtttttagt aatgtgtact gtgagctgtc ttctgtataa tgtattttgt
                                                                     3000
aatgtatttt teteatetae caaaggatga aacaaataaa attatttaaa tagttaaaaa
                                                                     3005
aaaaa
```

```
<210> 5143
<211> 604
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (178)...(250)
<223> similar to gi3845179 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
ttattccagc aatcaaaata attaaaaaca tctcaaatta ttatacacat acaaaatagg 300 tacagagtct tttgcttcct cccacccta gggggaaaaa ctgctttgtg ctttgggaag 360 ttgtctctga aacccgggga cagaggacgc aggacagact aggagggagc cgggaggatg 420 ggctgcagct gtggaggagg gtttcagagg agaggaggtcg gagagcagag gcctgagaag 480 ccagaggcag gtggaagag ggtggaaagt gagcagcggg ctgggctgga gccgcacacg 540 ctctcctcc atgttaaata gcacctttag aaaaaattcac aagtccccat ccacaaaaaa 600 aaaa
```

```
<210> 5144
<211> 1462
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1438)...(1026)
<223> similar to gi3152703 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5144 ttttttttt ttccaggtca acacgctttt attgccactt ctggctcccc tcgtcccagc 60 aagatteeta eetettaeee tgtaggaata etgageteeg atgeagggga atggggtggg 120 ggtgttacca cttctcctct gcacactgcc aagttaaaga aaaccctgct tgctggagag 180 ggagggccag acagggagga attcaagggc atgtatggct cagtcccact tctgactgca 240 gagtataggg accagggttc caaacttttt ttcgaagtaa gggaggtggg gaagaatttg 300 gctgctgttg taccccgtgt cctagctgcc atgtttccat ggaaatgaag gtggggcagg 360 atgtagetea etetgaetae etgggaggat ggeaggaeag geatttggta aacatatete . 420 cotocactor tacctagoac atacggotgt coccagooga cocccaggot etetecteac 480 tgcctgctcc actcccttcc cttctggagc tggtatcatg ccaagtggag tccaggcagg 540 gctgccagtg ctactctcca cagccaggtc tcactggcac gttaggatct aagtatgtcc 600 gccaagetea ggageateee tgetagaget ggtggtggea gtgeeteggt gaaaaggeag 660 cagcagtace eccaactete tgtgcaactg etgttteeca aacaaaactg aaaacataaa 720 cccaaacact taagggtatc actctggcac aatgctgagg actgggatgg gggagaggag 780 gegeateete etgagaetgg ageeaeetgt geaeeetgee ttetgeeeat etggagtttg 840 ettetteeca etgggetgte aetgggggge tggaateeaa ateteeattt ggtgetgett 900 tragraccea ctgctgttcg tttatgaggc ttgccagttt ccatggtgag gaggtgcagg 960 atggattete agtaceatgg gteageeegg tgetgetggt tgtagagetg tagettgate 1020 tgatetttga tetgatteae taggatetgg gacageagaa tteecaceag etgggggatg 1080 gccaggccta gagccacacc accaagtaag aataggttgc tgtgtatcca gttgaccaac 1140 ttgtcaatac agccattggt gtagatgact ttgctagctt ccaagtagtc aaaggcctgc 1200 ataccttggc cacacatagt gttgatcact gcctggtcag gagtaggcaa gcaacaggag 1260 taaggcacag agcagcgctc tcgactgggg ttgtcttctg agcagttgaa atacatgttc 1320 tgagaccagt cettgtagga aateceteea cageagetaa aetttttetg geeaaaatea 1380 atgaggttet geagateeaa gteatetegg tagtgeaeaa tggeattgtt gatgatetea 1440 ctcactttcc ctcgacccgg ga 1462

```
<210> 5145
<211> 834
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(575)
<223> similar to gi3721617 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5145 60 gaattcccgg gtcgagggcc agctctgcga cctggacccc agtgctcact tctacgggca ctgcggcgag cagcttgagt gccggctgga cacaggcggc gacctgagcc gcggagaggt 120 180 geoggaacet etgtgtgeet gtegttegea gagteegete tgegggteeg aeggteacae 240 ctactcccag atctgccgcc tgcaggaggc ggcccgcgct cggcccgatg ccaacctcac tgtggcacac ccggggccct gcgaatcggg gccccagatc gtgtcacatc catatgacac 300 360 ttggaatgtg acagggcagg atgtgatctt tggctgtgaa gtgtttgcct accccatggc 420 ctccatcgag tggaggaagg atggcttgga catccagctg ccaggggatg acccccacat ctctgtgcag tttaggggtg gaccccagag gtttgaggtg actggctggc tgcagatcca 480 540 ggctgtgcgt cccagtgatg agggcactta ccgctgcctt gcccgcaatg ccctgggtca 600 agtggaggee cetgetaget tgacagtget cacacetgae cagetgaact etacaggeat 660 cccccagctg cgatcactaa acctggttcc tgaggaggag gctgagagtg aagagaatga cgattactac taggtccaga gctctggccc atgggggtgg gtgagcggct atagtgttca 720 780 tecetgetet tgaaagacet ggaaagggag cagggteett categactge titeatgetg 834 tcagtaggga tgatcatggg aggctatttg actccaaggt agcagtgtgg tagg

```
<210> 5146
<211> 413
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3) ... (299)
<223> similar to gi3228237 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5146
gctgtgggtc atcctgctgc cagtccagct gctgcaagcc cagctgctcc cagtccagct 60
gctgtaagcc ctgctgttcc cagtccagct gctgtaagcc ctgctgctgc tcctcaggct 120
gtgggtcatc ctgctgctcc tccagctgct gcaaaccctg ctgttcccag tccagctgct 180
gtaagccctg ctgctgctc tcaggttggg ggtcatcctg ctgccagtcc agctgctgca 240
agccctgctc ctcccagtcc agctgctgt tcccaatttg ctgccagtgc aagatctgag 300
gctctgccca caaacctcag tgggtcctac agatccggc tctccaggaa tgactgcagc 360
tgtgtcctga attcctgaag cacgtctctg aatctgtcct cctctggact aag
```

```
<210> 5147
<211> 440
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(176)
<223> similar to gi5668703 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400>	5147	•	•	.•	. •	
cccggacccc	agcaccctca	gcaggcagca	acgcagggtc	tacccccgag	gcccccactt	60
cctcaccagc	cacgccagcc	acatcttctc	caacággggc	ttccagcgcc	cagcagcaac	120
tcatgcagca	gatgatccag	cttttggctg	gaagtggaaa	ctcacaggta	catgaggċag	180
tgggggcagg	tgctgggagc	accactttga	tcctgggagg	tttcaaggga	agcaatagaa	240
tagaggcagt	agggcaagct	tgggagtcag	gtcctgttct	gccacttgct	agccttgggc	300
aggttactga	tgctccctga	gttcagtttg	tgcagatgtg	aaatagagat	gagaagagta	36.0
atggtactta	cccgtgcact	acatactgtt	ctaaatgctt	tagattttgg	agctcattta	420
cgactcattt	accacattcc			•	•	440

```
<210> 5148
<211> 737
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (412)...(122)
<223> similar to gi4589484 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5148
ttttttttt ttcaagctgg cttttcgtat attgtgtata aaaagatcag attcaggatg
                                                                      60
atttggtggg attgccaggg gctgaccgga gtgttgctgg gaaggagcct cagctccgct
                                                                      120
ccaggtcctc caccaggtag gactgggact cccttagggc ctggaggagc aagtccttgc
                                                                      180
aggtccagtt ccaggctggt gtgaaactga agagcttccg catcttgctt gggttggtgg
                                                                      240
gctcggcccg cactgcctgg tactgctcat ccgtcaggac cttcccgtac agagcatcca
                                                                      300
gcagccactc aacgtttgtg accctcgcga taagcgcagc ccggtgctgg tctataaagt
                                                                      360
gcaggcctgg cttggctgcc gactgaggag gggcctggat cccagctggc gcggctccag
                                                                      420
agccctggtg cgtggccgcc tgcagctgcc cggccatctc ctgcaggccc atgtcgcgca
                                                                      480
gcacgttagc ggtgagctcg gcgccgtagg tctccaggta gaagctgacc agcttgtcgg
                                                                      540
tgaggtccaa ggcgtccatg gacagcagcg cgcccgggg gatgcgcccg tagccctcgc
                                                                      600
```

```
gcagcggcac cgacagcagc ttcagcttga acttcttgag ctcctcggcg gtcaggttct 660 ccagcgcatc caggatggcg tcgcgcgcg gccccatggc tccaggatcc ccggccgctg 720 ccgccgctca ccccgct 737
```

```
<210> 5149
<211> 1741
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3)...(889)
<223> similar to gi1903218 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5149
aggaggtggc cctgagagcc acagcagaga atgagtttgt cgttctaaag aaggacgtgg
                                                                       60
actgtgccta cctgcggaaa tcagacctgg aggccaatgt ggaggccctg gtggaggagt
                                                                      120
ctagetteet gaggegeete tatgaagagg agateegegt tetecaagee cacateteag
                                                                      180
acaccteggt catagteaag atggacaaca geegagaeet gaacatggae tgeateateg
                                                                      240
ctgagatcaa ggctcagtat gacgatgttg ccagccgcag ccgggccgag gctgagtcct
                                                                      300
ggtaccgtag caagtgtgag gagatgaagg ccacggtgat caggcatggg gagaccctgc
                                                                      360
geegeaceaa ggaggagate aacgagetga acegeatgat ecagaggetg aeggeegaga
                                                                      420
ttgagaatgc caagtgccag cgtgccaagc tggaggctgc tgtggctgag gcagagcagc
                                                                      480
agggtgagge ggeeeteage gatgeeeget geaagetgge tgagetggag ggegeeetge
                                                                      540
agaaggecaa geaggaeatg geetgeetge teaaggagta eeaggaggtg atgaaeteea
                                                                      600
agctgggcct ggacatcgag atcgccacct acaggcgcct gctggagggc gaggaacaca
                                                                      660
ggetgtgtga aggtgtgggge tetgtgaatg tetgtgteag eageteeegt ggtggagtet
                                                                      720
cctgtggggg cctctcctac agcaccaccc cagggcgcca gatcacttct ggcccctcag
                                                                      780
ccataggcgg cagcatcacg gtggtggccc ctgactcctg tgccccctgc cagcctcgtt
                                                                      840
cctccagctt cagctgcggg agtagccggt cggtccgctt tgcctagtag agtcatggag
                                                                      900
ccagggette etgecaagea cetgeetgee tgeateactg caetgaatgg catgtgaatg
                                                                      960
gaaaatgtgt gettgettee agaatettet ggatgtteet acagagggga agaeetacag
                                                                     1020
agggaaagac cctcgggccg ctcccctgcg ccttttcatg ctagggagat gcatcctagt
                                                                     1080
tgtcctcctg gcagctgttt tcagaggcat tcccagccct tcacttaact cctacttagc
                                                                     1140
tecaaaatae etgtateeaa titgtattat teeceeaget eteagggata agaceagtee
                                                                     1200
cccagcgtgg tggtcagcac ggaagctcca ccttctgggt ggaggcgcca tcctaaccat
                                                                     1260
ccagccaggc cacccacaac ccgagaatca gggagaaagt ccctccccag cagccccctc
                                                                     1320
ctcctggctg ggaagaatgg tcccccagca agcacttgcc tgttcattcc cgttcatgtt
                                                                     1380
ttgcttctct ctcagactgc cttcctgctt ctgggctaac ctgttccagc caggctcctc
                                                                     1440
atgtgacete geagttgaga ageceattat egtggggeat cettttgeet acageceetg
                                                                     1500
gttagggcac tttggacagg tcttgctatt cagtgaacct ttgtacattt caaagaagac
                                                                     1560
tecatggetg etecagatge eccettgetg ggtgeaggtg gggaetgtee aatgeagage
                                                                     1620
tggcgggaca gagagttaag ccacttcctg ggtctccttc ttatgactgt ctatgggtgc
                                                                     1680
attgeettet gggttgtete gatetgtgtt teaataaatg eegetgeaat geaaaaaaa
                                                                     1740
                                                                     1741
```

```
<210> 5150
<211> 1090
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)...(818)
<223> similar to gi3868802 in the genepept database release 114, \( \)
Run with FASTXY 3.3t00, default parameters
```

<400> 5150 cccacgcgtc cgaagagtgt agaggctgat gtcaatgggt taccaagagt gatggatgaa 60 ataatcctgt gcagaacaga tctggagatt cagtatgaaa ccctgagtga ggagatgact 120 tacctcacaa tgaaccataa agaggaaatg ctggttctgc agtgcgcagc tggaggcaac 180 gtgaacgtgg agatgaacgc agccccggg gtggacctca cagttctgct gaacaacatg 240 cgagctgagt acgaagccct tgcagagcag aaccgcaggg acgcggaggc ctggttcaac 300 360 gagaagagcg cetecetgca geageagate tetgaggatg teggageeae aaceteagee cggaatgagc tgactgaaat gaagcgcact cttcaaaccc tggaaattga acttcagtct 420 ctcctagcca cgaaacactc cctggagtgc tccttgacag agaccgagag caactactgt 480 gegeagetgg egeagateea ggeteagate ggggeeetgg aggageaget geaceaggte 540 agaaccgaga ccgagggcca gaagctggag tatgagcagc tcctggacat caagctccac 6.00 ctggaaaaag aaattgagac ctactgtctc cttataggag gagatgatgg agcctgtaag 660 tctgggggtt acaagtctaa agattatgga tctggaaatg tgggaagtca agtcaaagac 720 ccagccaaag ccatagtggt taagaaagtt cttgaggagg tagaccaacg cagcaaaata 780 cttaccacca ggctccactc cctggaagag aaatctcaaa gcaattaatt tgagatgcaa 840 cagagaacgt atgccacata gcccctgcga agaaaaggca ttatgtatct gtccagaaaa 900 atgtgcatgt cctaagaaaa atgtctaacc tgttgtcttt ctgttacttt ctttctgggc 960 aatcaatgac agcatctccc ccattccatc ttagaagaat gccacacaca aatatgactc 1020 catttggatt atccctacag aaatctgttg tcaattcttt gtattcaata aacctcttct 1080 ttagcaagtt 1090

```
<210> 5151
<211> 514
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (197)...(435)
<223> similar to gi4874315 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5151
tttcgtgggg aagggccca ggcaggctga ggattctagg ggcggggtgg gaaggaggac 60
cggccgaacc ttgggtgtgg gacagagtgc gtgcgtgtgg tgtgtcccca agggcaggaa 120
```

```
ggtggcgaag ggaggcgaat ccgagtggt ggagggaggg gaagggcggg aggagaaaaa 180 ggtgggagga ggaccaggtg ggagggtggc ggctcactca ggacccagcg ggggcagcgc 240 gatgaggcgg gtgaccctgt tcctgaacgg cagccccaag aacggaaagg tggttgctgt 300 atatggaact ttatctgatt tgctttctgt ggccagcagt aaactcggca taaaagccac cagtgtgtat aatgggaaag gtggactgat tgatgatatt gctttgatca gggatgatga 420 tgttttgtt gtttgtgaag gagagccatt tattgatcct cagacagatt ctaagcctcc 480 tgaaggattg tttggattcc acacagagtg gctg
```

```
<210> 5152
<211> 726
<212> DNA
<213> Homo sapiens
.
<220>
<221> misc_feature
<222> (2)...(272)
<223> similar to gi5917706 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5152
ggcctggatc cacaacatca cccacgggtc ggggatcggc aagccaatcg aggccttcca
                                                                       60
                                                                      120
tacttegtet aggaatgege geaacgtete céaggeetgg egecaegegt tgeeetteae
taagateetg egegtgeagg aggtgtgege eggegegetg eagetgetgg getaeeggee
                                                                      180
tgtgtactct gcggaccage agcgtgacct caccctggat ctggtgctgc cacgaggccc
                                                                      240
agaccacttc agctgggcat cgcctgactg agaactctgg gccttagagc aggccccgaa
                                                                      300
ctgtggtcgc caggcccagg aggcgactgc atggtggaga gggagctggg gcgcatgggg
                                                                      360
aagcaggtcc ctactatcaa ccgggagttt ggggtcctcc cctgaagtag gcaaggactg
                                                                      420
                                                                      480
cacgtttett teteteetga tteteggttt teetttgaat ettetggage tgeettetea
teaggtgeae tetteatgga aageaactet tgeecetaee tettetggge geagggagta
                                                                      540
agttactgct aaattaaatt aaatgtgtgc caggccgggt gcggtggctc atgcctgtaa
                                                                      600
teccageatt ttgagagget gaggegggtg gateacetga ggteaggagt tegaaaceag
                                                                      660
cctggccaac atagtgaaac ccctctcta ctaaaaatgc aaaaattagt ccggcgtggt
                                                                      720
ggcacc
                                                                      726
```

```
<210> 5153
<211> 1071
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1003)...(379)
<223> similar to gi538200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5153
 ttttttttt ttcataactc tggtcactat tttcatccgc atctgtcact tctgatgcgt
                                                                        60
                                                                       120
 ctctaacatt tataagattt ctctggggag ggatttgacg tatccatgcc ccacctcttt
 ctacatttat gggattgagc tctccaccag ccacccatgg gctgatgtct ttggaatatg
                                                                       180
 gatctagtac caacagagtc agaaaaagag atggggtcca atgggctaca gttgggtggt
                                                                       240
                                                                       300
 ggtcctggga tacacagcac agtggcctct actgggggat ggcagctttc caggagaaga
 gtcgcaagct tgcctgtggg acttgtgtct tgtggagagg acagggctgc ctcagcttgg
                                                                       360
 ggagacagac agagtgttcc gggtcccctc tttccgccgc agcatgaagt ctctgggggc
                                                                       420
                                                                       480
 gactggactc atggcataga agacgttggc attgtcagga atcaggagca cccggtcccc
 aggaaggact tgaaagagct gatagtcaca ggcccagggc tggggcacat tgtgcttctg
                                                                       540
, caaggetege eggaceaege tgggggettt gteetgaetg gteageaaga tgettegata
                                                                       600
 caggitizen tiggicattgt cgatgetgac geggatgaca egggeeteeg agetetgetg
                                                                       660
 cgccgggagg gggattcgag ggctgcccag aggcaaagcg aagggccggg ggctgggcag
                                                                       720
gtccaggete aggggcaget tggtgetggg gecetgggge cetggagagg cegggggaet
                                                                       780
 gccagcagga gcatctctgc ttctaggact tgagggggt gaccctgggg acacactgga
                                                                       840
ggtgggggat gaggggtccc cgggactccc actaggtgat gagcttttct ctcgggcaag
                                                                       900
 cttcgcactg agacgcttgg tgaggctgat ccgccgtcgg atgcgtgggg agctggggca
                                                                       960
 ggaggcaget ggtggeteaa tgaceeggga gageeggtag etgaggggte aatetgtgga
                                                                      1020
 tgaggtggtg ggggcaggaa atacagggga tggagagata agagttggaa t
                                                                      1071
```

```
<210> 5154
<211> 608
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (611)...(339)
<223> similar to gil613788 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5154
ttttttgctg ctccaggagt ttttattgaa cattctggtg gggttggggtg gggttgggag
                                                                       60
gtgtcctgtc agtcagtcat ccaccaatag cctggggggc cgagactcct gaccccattc
                                                                      120
tgggcccgtc ttttggcctc cctgggcagc gcccagaaca gagggggccg cctgcggggc
                                                                      180
tgagtgggct ttgtatgggg ggcaccatgg aaggctgccc gccacaggac aggccctggg
                                                                      240
ttgagagggc ctgggaaggt gccgccaggc tagaggtcgg gaagggcgcc tgagcagaca
                                                                      300
egecageate egetgetagg tgetggeeag ggetggggee ttggageece getgettgtt
                                                                      360
catggcactc aggagetget gcacatatga ggtcagcagg teatccatet tatageccag
                                                                      420
                                                                      480
ggaggteteg cacageagge ggetgecaeg geceaggete eecagegeea tgtggaagta
ggtgctgccg ctgctccagc tggagatctt ggtgaaggga taggtggtga gcaggtcctt
                                                                      540
ggtcttgggg tggatgagca gaaccccatg tcggttgatg gcgatgagga tgacgtccgg
                                                                      600
                                                                      608
gtaggaag
```

```
<210> 5155
<211> 1205
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20)...(772)
<223> similar to gi6014681 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5155
cggggagece cegggggece egecacegee geegteegee gteacetace eggactggat
                                                                       60
                                                                      120
eggeragagt tacteegagg tgatgageet caacgageae tecatgeagg egetgteetg
                                                                      180
gegeaagete taettgagee gegeeaaget taaageetee ageeggaeet eggetetget
                                                                      240
ctccggcttc gccatggtgg caatggtgga ggtgcagctg gacgctgacc acgactaccc
                                                                      300
accepangety ctcategect teagtgeety caccacagty etggtggety tgcacctytt
                                                                      360
tgcgctcatg atcagcacct gcatcctgcc caacatcgag gcggtgagca acgtgcacaa
teteaacteg gteaaggagt eececeatga gegeatgeac egecacateg agetggeetg
                                                                      420
ggccttctcc acceptcateg gcacectect cttcctaget gaggtggtgc tgctctgctg
                                                                      480
ggtcaagttc ttgcccctca agaagcagcc aggccagcca aggcccacca gcaagccccc
                                                                      540
egecagtgge geageageca aegteageae eageggeate aececgggee aggeagetge
                                                                      600
categories accaecatea tggtgecett eggeetgate tttategiet tegeegteea
                                                                      660
cttctaccgc tcactggtta gccataagac tgaccgacag ttccaggagc tcaacgagct
                                                                      720
                                                                      780
ggcggagttt gcccgcttac aggaccagct ggaccacaga ggggaccacc ccctgacgcc
eggeageeac tatgeetagg cecatgtggt etgggeeett eeagtgettt ggeettaege
                                                                      840
cetteccett gacettgtee tgeeceagee teaeggacag cetgegeagg gggetggget
                                                                      900
tcagcaaggg gcagagcatg gagggaagag gatttttata agagaaattt ctgcactttg
                                                                      960
aaactgteet etaagagaat aageatttee tgttetteea geteeaggte caceteetgt
                                                                    .1020
tgggaggegg tggggggeea aagtggggee acacactege tgtgteecet etecteecet
gtgccagtgc cacctgggtg cetectectg teetgteegt etcaacetee etceegteea
                                                                     1140
                                                                     1200
gcattgagtg tgtacatgtg tgtgtgacac ataaatatac tcataaggac acctcaaaaa
                                                                     1205
```

```
<210> 5156
<211> 1762
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1763)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (127)...(1067)
<223> similar to gi3874026 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5156
                                                                       60
gcaccctccc ctcacaatcg gcagcataag cacagacgta aacgcaggaa ccaatgcgat
tttaggttga atttaggaca gcgctggaac ttcactttac ccctcttgcg gtcacacgag
                                                                      120
caaagcgagc tgaattcctt cttgtggacc attaagcgag acccaccatc ttacttcttt
                                                                      180
ggcacaatcc atgtcccgta cacccgagtt tgggacttca tccccgacaa ctctaaggag
                                                                      240
gettteetge agágeageat tgtgtaettt gagttggate teacagaece etataceate
                                                                      300
teagetetea ecagetgtea gatgetgeea cagggegaga acetecaaga tgtgeteede
                                                                      360
                                                                      420
agggacatet actgeegeet caagegeeac etggagtatg teaageteat gatgeeettg
tggatgaccc cagaccagcg cggcaagggg ctctacgcag actacctctt caatgctatt
                                                                      480
gccggaaact gggagcgcaa gaggcctgtc tgggtgatgc tcatggtcaa ctccctgact
                                                                      540
gaagtggaca ttaagtcccg tggagtgcct gtcttagacc tgttccttgc ccaggaggct
                                                                      600
gagcggctga ggaaacagac tggggcagtg gaaaaggtgg aagagcagtg ccatccattg
                                                                      660
aatgggttga acttttcaca ggtcatcttt gctttgaacc agaccctcct gcagcaggaa
                                                                      720
                                                                      780
agectgegag caggeagtet teagateece tacaegaegg aggateteat caaacaetat
aactgcgggg acctcagctc cgtcatcctc agccatgaca gctcccaggt tcccaatttt
                                                                      840
attaatgcca cgctaccacc tcaggagcgc atcactgctc aggagattga cagctactta
                                                                      900
                                                                      960
egeegggage tgatetacaa geggaatgag agaataggga agegggtgaa ggeeettttg
                                                                     1020
gaggagttcc ctgacaaagg cttcttcttt gcctttggag ctggtcattt catgggcaac
                                                                     1080
aacacagtgc tggatgtttt gcggcgtgaa ggctatgagg tagaacacgc ccctgctgga
                                                                     1140
cgacccatcc acaaagggaa gagtaaaaag acctccacac ggcccactct gtccaccatc
                                                                     1200
tttgetecaa aagteeetae eetggaagta eeggeaceag aageegtate eteagggeae
                                                                     1260
teaacgetge eteccettgt gteceggeet ggaagtgeeg acacgeecag tgaggeegaa
                                                                     1320
cagaggttcc ggaagaagcg gaggcggtca cagcggaggc cgcgactccg gcaattcagc
gatetgtggg teegeetgga ggagagtgae atagteeege aacteeaggt ecetgteetg
                                                                     1380
gacaggeaca tetecaetga aetgeggete cetegeegtg ggeatteeca ceacageeag
                                                                     1440
atggtggcca gcagtgcctg cetgtetete tggaeteetg tgttetgggt getggtgetg
                                                                     1500
                                                                     1560
getttecaaa cagagacaee ceteetgtaa egaetggaag caecaggeta agaacetgae
ccctcggact tgaagaatgg ccattcctgt actccacatt ctggtctagc cttgttgggc
                                                                     1620
                                                                     1680
ccaatccaga agagactgct cttgaaaaag cggcccagtg ttgattcttc tctttccaag
gaatgtgact ttgggttatc caactttggg ggcaggtgta cagttttgta acataagtga
                                                                     1740
gtgtgntgtg aaaataaatt at
                                                                     1762
```

```
<210> 5157
<211> 1701
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1702)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1653)...(984)
<223> similar to gi4903004 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5157
                                                                       60
tttttttttt ttggctgtgg ttgtaggaac caccctacag cctagaagac tttattaaga
tettattget tatgeagtta aagagaeact gattgageta eaggttteet gtaeetggte
                                                                      120
tcaggtcact ctgtgcagag cttccccagg ctgttgggag ctggggagact gctaggcagg
                                                                      180
ggcaggcccc agagtgggaa gcatggtacc tcctaggagc ctcagagtgg gtagcgggct
                                                                      240
                                                                      300
tcaagacage cetcagggtg aacagagagg tcaggagtgt eggettaage cagggeecag
gggctacatt ccctgagatg agtcaagccc agccctctct ggggtttcca gaacaaaggc
                                                                      360
taggtgtggg gagcagcact gtggagaggg cagggagcat gtctctaggc attgctggaa
                                                                      420
                                                                      480
ctggaggaga ctgtcagagt ggtttgggta atggttgtat aatctgtggc aactgggcct
                                                                      540
tettgeatga aagtggaagg gtgaggatee ettatggaag agteatgeae eatggetggg
                                                                      600
ctggactage cagetecagt ggetetgetg ggtgactaaa gtaggcaagg aaagecaett
                                                                      660
gttgcccaca ccccactttc atcaactctg ttcatgcagg acaaagcagg gagctgccca
acaaggatgg ggttatttct caggcctagg tattgatgtt accttaattc tttagtctgg
                                                                      720
aagaacttgg ttgggggtgg gggatggtaa gcatttcctt aaccaaaccc acacttcaca
                                                                      780
                                                                      840
tetectaggg gtacceette atecaceaac etecagagaa taacetgget geeetcaett
                                                                      900
ctccagcttt tctcacaagg cacttgttac agggctgctg atgggagagg gaggaaggcc
tgggaggggg atctggtggt ggcgcccaat ctacagggtc cggaatcagg gtggaagttg
                                                                      960
tcagggacta gcggctgcca tagtacaggc gcatggccag gccaatgagc aatgtggcca
                                                                     1020
ggaagaaggc ggctgtgagc tgcagccgta gcaggactgc tgagagcacg gcgttgacca
                                                                     1080
ccagcgagca ggacaccaca aagaggcgtg tgatgctgct gccatgcttc atgacagcag
                                                                     1140
acatgagcag tecatttagt gcctggctca gcaccacgag tgctgcccat cctgagaaac
                                                                     1200
                                                                     1260
cttccaggag gcctgggcca gagccgccgc cagcatgcag acctagattc agaagcacac
caaaagtgta gaggaagagg ttctgaagtg ccaggggcag ccgctgtcgc ttcatgagca
                                                                     1320
                                                                     1380
getetgtgta cactgacgac aagcetgaga tgaggcagta cagaatgagg agcagcagge
ctagcggagt gatatgcagg ggcatggggc tggcagcagc tgctggaggg ggactgggaa
                                                                     1440
gggtgttccc gggaacttga aggcccctg ctgcatagca ggctcccgca gccatcagca
                                                                     1500
gcagcagcgc taacccctga cgcacagaga ggcggtgccg gaggcagagg cagtagagcc
                                                                     1560
                                                                     1620
cagctgtgct tccaatcttg agattactca gcacctggta ggtgctgggg tccatgtaac
getgaagata gateaceagg ttgttettag egeeggeeg egtgggtega egenggtnet
                                                                     1680
aaggacgtcg agcggggtca g
                                                                     1701
```

```
<210> 5158
<211> 663
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (96)...(219)
<223> similar to gi3327068 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5158
gatttcatct ttcagctgca tcttctgacc ctgttaaaaa gggagtacta acagtggact 60
tctctggagt actaacagtg gacttctct cgtagggtta tgataattca gagagcagtg 120
ttcggaaagc ttgtgtcttc tgcctggtgg ctgttcatgc ggtaattggt gatgaactaa 180
aaccacatct cagtcaactt actggcagta aagtaagtag tgctgctgtg ctttagagat 240
ggtggccata gtacatcttt caaaacttag ttacatgtct gtaacagtaa gcttttatt 300
tggcatttaa taagtcaggc tttgagcatc caacttgccc ttattattc tgttttgtat 360
```

```
tttatcttt tctactctaa catttgttag atgttcactc aggtgaagtc agcagtttgt tgtgggtgatg ggtaggtttc tgtgagagaa aatgcctgca gcttctggtt atttataata 480 gttagctgac tccttaccaa atcccagacc caaatcttta cccctgacca ctgttttatt 540 aagaataaat agactgttgt ggttatatat attaatggat tactgtatat ctctccaaat 600 atagaatact tgcacattta aaaatttttc cccttaagaa ctatgataat caaatatttg tcg
```

```
<210> 5159
<211> 2289
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(266)
<223> similar to gi3879893 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5159 ggccatggtc ttcggagggg tggtgcccta cgtcccgcag tatcgggaca ttcgcaggac 60 gcagaacgcc gacggcttct ccacgtacgt gtgcctggtg ctgttggtgg ccaacatttt 120 geggatacte ttetggtttg gaaggegett tgagteeeeg etgetgtgge agagegeeat 180 catgatectg accatgetge tgatgetgaa getgtgeace gaggteegtg tggeeaacga 240 getcaaegee aggegeeget cetttacage tgeagatage aaggatgaag aagteaaggt 300 tgcccccagg cggtccttcc tggacttcga cccccaccac ttctggcagt ggagcagctt 360 eteggaetae gtgeagtgeg teetggeett eaegggegtg gegggetaea teaectaeet 420 gtccattgac teegecetgt ttgtggagac cetgggette etggetgtge tgaccgaage 480 catgotgggt gtgccccagc tttaccgcaa ccaccgccac cagtocacgg agggcatgag 540 catcaagatg gtgctcatgt ggaccagtgg tgacgccttc aagacggcct acttcctgct 600 gaagggtgcc cctctgcagt tctccgtgtg cggcctgctg caggtgctgg tggacctggc 660 catectgggg caggectacg cettegeceg ccaececeag aageeggege cecaegeegt 720 gcaccccact ggcaccaagg ccctctgaca gtggggagga cgaggatgtg ggaccgccag 780 ccgcgggcac tggtgggccc tgaacctccc cgcggggagg gtgggtaccg tggcccctgc 840 aggtgtggca gagatggggc ataggcattg gggtctccat cagcctctgt agggtgtctc 900 agggttgtca gtgggggtgg ggctgggacg ctgtttgtgc tcagcgggga cagccagggt 960 tgatctggcc ccgagggttt tggatgtttt taggatgaca taaaaagcaa gtgttttccc 1020 cattteetet tatgaaacae egtetgagee caaggtacae attgggegge etgeaggaae 1080 ctgctccagg tggacacacg ggccagcagc cgcgaacctt gaagctgggg tgaccgcagg 1140 agaccctgta aggcctgtga gcggagccct cgaccccgtg acaccctggc cagacaccct 1200 gcttggactg gggtggcctc tgctacccag gggtctggca cgggggaggg ctggggcttt 1260 ctctgcctgg tacacacgga aaggcggctg tgcggacgca gggtcaccgt gctccgggtt 1320 ttctgacagt cggtgtttcc tgggcctttg gagtggctgc gaggcctgaa cgccttgtgg 1380 atcogctgtg tecagecegg etgageateg ecagggetag eteatgetge tettgteage 1440 ctctggttct cctcgagtcc ttggggacgt ggcagatgcc agcgaccatc agacaacgtg 1500 gaggecetea tgggeaatgg etgaggggge egggetgagg etgtgeacat geagtetgea 1560 egedactett gggetetget ggeggagate ecetteette tgggtgeaga etgeacetee 1620 ggatgcagtt ttgatgtcca tcttccagga gagagacggt ctcgggtcca gggagtggag 1680 ggggctgccc ctgccgtgca ggtcctggcc gatggcgcct taccctgctg ccctgggctt 1740 1800 actgcccacc cccgtgtgct ggctccctca cttctggctg cagtgggagc cgccagtctg 1860

```
accettqtea cegeacgete tqceeccace cegttgcaag aggteacace atgteageag
                                                                    1920
cettgeactg accgcageeg geocccagge etcagagite tggatgette egtgeggete
                                                                    1980
caacaggcat cgtcttccct tccgcaggtg gaggggccgc ttcccgcagg catctgagct
                                                                    2040
                                                                    2100
etgtgeeggg geegtggeea tgggaagatg ttecaegetg ectecteete gagtttteet
                                                                    2160
eggaaacact cttgaatgte tgagtgaggg teetgettag etetttggee tgtgagatge
tttgaaaatt tttattttt taagatgaag caagatgtct gtagcggtaa ttgcctcaca
                                                                    2220
                                                                    2280
ttaaactgtc gccgactgca ggcgcagtga ctgctgaaaa aaaacctcgt gccaagcttg
                                                                    2289
gcgtaagcg
```

```
<210> 5160
<211> 957
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (110)...(455)

<223> similar to gi505658 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5160
gaatecaaat ggteeteaca gtgeeaegge eeggggeagg atggeageee etetgeaeet
                                                                     - 6Ô
tgcacgetgg etggtteact ettaactect tacccagetg aaagtgaatg ggcggetaga
                                                                      120
ccaagaggag tttgcgcgac tgtggaageg ccttgttcac taccagcatg ttttccagaa
                                                                      180
ggttcagaca agccctggag tcctcctgag ctcggacttg tggaaggcca tagagaatac
                                                                      240
agaetteete agagggatet teateageeg tgagetgetg catetggtga eeeteaggta
                                                                      300
cagogacago gtoggcaggg toagottooc cagootggto tgottootga tgoggottga
                                                                      360
agccatggca aagacettee geaacetete taaggatgga aaaggaetet acetgacaga
                                                                      420
                                                                      480
aatggagtgg atgageetgg teatgtaeaa etgaageaaa gaggaaagea gaeeeatgge
teaggacaag eteceagtga teacteaaga atetggetet cattetaaga ggetgtgetg
                                                                      540
cccagtatgg tggttgtgat aaatctaaac cagccctgca tgaaacagag tccaagctgt
                                                                      600
ctcccaacag cctgggttcg gtccttggct ggcccaggcc cagttaagcc tgtggccacc
                                                                      660
aagcagetea tetgageact ttgggatgta tteageetae gttgeeetgg aaaaggaage
                                                                      720
aggagatgtc tecetgtggg aaaggagaag agaagttgtc tetgagteec etgteaceag
                                                                      780
ttggattcat ttcttggaag agccagaatg agccactttg accaccttg ggtgctatgg
                                                                      840
gtgacacaag agetgtecae tgggtgtttg cagaataatt acactatett atgtetggat
                                                                      900
cctgatgatt tcacagctaa atggcaaaaa taaaacatgt ttcccataaa aaaaaaa
                                                                      957
```

```
<210> 5161
<211> 978
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(829)
```

<223> similar to gil335277 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5161
                                                                       60
gaaagccaca aggacgacgc ccacaaggag gaaaccagcc ccaacgtccc ccacctcctc
caggaaagcc acaaggacca cccccacaag gaggaaacca gtcccaaggt cccccacctc
                                                                      120
ctccaggaaa gccagaagga cgaccccac aaggaggcaa ccagtcccaa ggtcccccac
                                                                      180
ctcatccagg aaagccagaa agaccacccc cacaaggagg aaaccagtcc caaggtcccc
                                                                      240
cacctcatcc aggaaagcca gaaagccgac ccccacaagg aggacaccag tcccaaggtc
                                                                      300
                                                                      360
ccccacctac tccaggaaaq ccggaaggac cacccccaca aggaggaaac cagtcccaac
                                                                      420
gtaccccacc tectecagga aagecagaag gaegaeeeee acaaggagge aaccagteee
                                                                      480
aaggtccccc acctcgtcca gaaatgccag aaagaccacc cccacaagga ggcaaccagt
                                                                      540
eccacegtee eccaceteet ecaggaaage cagaaagace acceccacaa ggaggeaace
                                                                      600
agtoccaagg toccccacct catocaggaa agccagaagg accaccccca caggaaggaa
acaagtcccg aagtgcccga tctcctccag gaaagccaca aggaccaccc caacaagaag
                                                                      660
gcaacaagee teaaggteee ceaceteetg gaaageeaca aggeeeacee eeaceaggag
                                                                      720
                                                                      780
gcaatcccca gcagcctcag gcacctcctg ctggaaagcc ccaggggcca cctccacctc
ctcaaggggg caggccaccc agacctgccc agggacaaca gcctccccag taatctagga
                                                                      840
ttcaatgaca ggaagtgaat aagaagatat cagtgaattc aaataattca attgctacaa
                                                                      900
atgeegtgae attggaacaa gtteateata getetaaett taatataeea ataaaataat
                                                                      960
cagcttgcaa aaaaaaaa
                                                                      978
```

```
<210> 5162
<211> 1868
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1868)...(1032)
<223> similar to gi854328 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5162
ttttttttt ttaacagtaa ttcttcagac tttattaaaa aatgacataa agtgcatctt
                                                                       60
attaaaaaat gtataaaaac cacataaatt cagggcccct gtgctgggca gtgttgatat
                                                                      120
cccttagagt ggaggaaggt gagggatgga gggtgaactg gggactgggg agaggaccag
                                                                      180
ggtgcagtta gttcctcgtg tttgagttca aagatggagc gagggtggat atggtgggaa
                                                                      240
ggggcacacg ggttctcacg caacaacgga ggaaggcagg cgacagtctc ttccctgaat
                                                                      300
tetgagggaa aggegtaeat tgteaegaaa teteteetga getegegetg teetetegtg
                                                                      360
tggccacage etgatacagg etggaaaggt ecaggagttg ggteegagee caggacetgg
                                                                      420
tgagggeege agtgeeaace tagecetetg gteeetgagg tggtgggaeg aeggeageaa
                                                                      480
caactacatc ctcggctgac tggcaaggca gaacgcacgc agcccaagct ggtcctgaat
                                                                      540
ctgcagtgag acagggcagc cggtggcagc gggataatgt ggaaggtgaa gaggccagtt
                                                                      600
ggtgagggtt tccaactctg tctcagacaa ccactttgga tgcatcccca gcacccttgg
                                                                      660
gaggccatga actggagcag ccgtgtgtgc tgcatgccat gctatctctt ccctctcatt
                                                                      720
ctagtttcac atttggaatt gttttttaaa caaagggctc agtttacata aggagcactg
                                                                      780
```

```
ttccaccaac ctaggcaggc ccccatattt ggccaggacc tctggggcca cggctgtttg
                                                                      840
ggtgtctggg tggtaggagc ttcgctactt gactggagag cagcaggcca gctggcccca
                                                                      900
                                                                      960
aggeteceaa gggeegggea ceaeggtegt gttecaegaa gageagageg gaggggaggt
                                                                     1020
ccaqttgacc ctctccgagc attcacagcc cctgaagcca gggcagcgtc ctctggaagt
caqctctcac accacagagt cacggatctc cgagccaagg cggacccggg gccgggggca
                                                                     1080
                                                                     1140
cactggggat acctccacga agctgtcttg gatgctgagt ggcctcttct ctgactcagt
                                                                     1200
gaagactcgg gcccccgggg ggctgtctga cagggactgg taccctcggt gatcgagcgg
                                                                     1260
ggtgctaggg ggccctaggc cgttgagtgg gcgggtctca gggggcagca ccacagggca
ggtcttgggg tgcacgctgg cacattcccc ctgcttcagg aagactttca tgctgttccg
                                                                     1320
                                                                     1380
gtgccggtag agcaagaata aaactgggag cagcacggcc agcacaaaga gcgtgcacat
                                                                     1440
caccaggaac tecttecagt aggacetgte tgcaccecag etggeettge caccagetgg
                                                                     1500
tgcactcaca cgcgatgtgc tgataatgac gggtacactg ccaccctcat ctgtttggtc
                                                                     1560
tgccaccccg tcctccacca cctctgggca gtagctggct accagctgct ggaagccctc
                                                                     1620
ctctagtgac cagcactgga actcccccag ctgttgggtg cccaccagca gcaggtcccc
                                                                     1680
agtgggtage acgtggcagg aggccgagge attgacgggg gccccgttgc gtagccagag
                                                                     1740
tegggtegee aggttggaga ggagegggea ggeeaaagtg tteaetgtgt tgggetggaa
ctggacttgc tcacatggct tctcccctgt tggtacaaaa gacggggaca caaccgaaga
                                                                     1800
cgcgctgcaa aggtccttgg cgctggctcc ctcgatgtcc tggatccacg gcctggtggc
                                                                     1860
                                                                     1868
cagctgag
```

```
<210> 5163
<211> 934
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (937)...(663)
<223> similar to gi485110 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5163
ttttttttt ttagattcag atatttaacg aatagtattg catggtacaa tcatgcaggt
                                                                       60
ttaaaataat agcaattgag tccataggag aagacgacat tcttgcttga caaggtagga
                                                                      120
                                                                      180
acaaattcat tatatttcac caagactaaa attacaaagt ttgggtgtgt aaaggcaaga
                                                                      240
tttaattgtt gggaaaattt atccgagcca gccaccacga caaaagccag gctgaccaaa
tcaaatggat tctttacatc ctccaagttt cagaagaatc ttgaatatgg ttagccagaa
                                                                      300
                                                                      360
gatatggtaa atttgacccc aaacatttgc ttgaaggagt aaggtcttct aatgagtgaa
tgtcaagaga tcagcacata agtaatagct tatttatect ttaggtcaca tccatctgtg
                                                                      420
aatcaagcag cettgeagte cacatggtea geatetetee catggetega ggeteaatga
                                                                      480
                                                                      540
tcaaggttgt ttagccagtc ttagagtata taaaaagcct ctccattttt ttttggttgt
tttagagaga gaatacgcaa gggaattett cacaggagga gacgtagtec taaateeett
                                                                      600
ctgctttccg ttgcattgga tgtatcactt gttctcttta ataatcattt tttccatcct
                                                                      660
                                                                      720
cattcattgt acttggacag ttitaacctg gggatgatgt tcatagactg tagttcctgg
aagagcagct tgcaggcata cggaatacgg agggaagaca cgtggcagga tgacttgcag
                                                                      780
taatggcacc agccagaata ccccagaagt ccacactgcc cacagacatc aacctcaaag
                                                                      840
gcatcacttg aaatcattag tetetetage aaaageatae tggeteeata acegattaaa
                                                                      900
cagtcacgtt ccatttcccc gagacgcaag ccac
                                                                      934
```

```
<210> 5164
<211> 1445
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(798)
<223> similar to gil314373 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5164
atgaagaagg aggtgtgctc cgtggccttc ctcaaggccg tgttcgcaga gttcttggcc
acceteatet tegtettett tggeetggge teggeeetea agtggeegte ggegetgeet
                                                                      120
accatectge agategeget ggegtttgge etggecatag geacgetgge ecaggeeetg
                                                                      180
                                                                      240
ggacccgtga gcggcggaca catcaacccc gccatcaccc tggccctctt ggggggcaac
                                                                      300
cagatetege tgeteeggge tttettetae gtggeggeee agetggtggg egecattgee
                                                                      360
ggggctggca teetetaegg tgtggeaeeg eteaatgeee ggggeaatet ggeegteaae
                                                                      420
gegeteaaca acaacacac geagggeeag gecatggtgg tggagetgat tetgacette
                                                                      480
cagetggcac tetgcatett egectecaet gacteeegee geaceageee tgtgggetee
                                                                      540
ccagecetgt ccattggeet gtetgteace etgggeeace ttgteggaat etaetteact
                                                                      600
ggetgeteca tgaacceage eegetetttt ggeeetgegg tggteatgaa teggtteage
                                                                      660
cccgctcact gggttttctg ggtagggcc atcgtggggg cggtcctggc tgccatcctt
                                                                      720
tacttctacc tgctcttccc caactccctg agcctgagtg agcgtgtggc catcatcaaa
ggcacgtatg agcctgacga ggactgggag gagcagcggg aagagcggaa gaagaccatg
                                                                      780
gagetgaeca ecegetgaec agtgteagge aggggeeage eceteagece etgageeaag
                                                                      840
ggggaaaaga agaaaaagta cctaacacaa gcttcctttt tgcacaaccg gtcctcttgg
                                                                      900
ctgaggagga ggagctggtc accetggetg cacagttaga gaggggagaa ggaacccatg
                                                                      960
                                                                     1020
atgggactee tggggtaggg gecagggget ggggtetget ggggacaggt etetetggga
                                                                     1080
cagaceteag agattgtgaa tgeagtgeea ageteaeagg etgeaaggge eaggeeagaa
aagggtgggc ctgcagcctg cacccccac cttccccaac ccttcctcaa gagctgaagg
                                                                     1140
gatcccagcc cctaggtggg cagaggcaga ccctccccag agctccttag gaagaagaca
                                                                     1200
gactggttca ttgaatgccg ccttatttat ttctggtgag gatgcatgcg tggggctgct
                                                                     1260
ggtgtttaga gtgggggcta cccaataaat cactgatact caaaacacca gcagaccetc
                                                                     1320
cccagagete ettaggaaga agacagaetg gtteattgaa tgccgeetta tttatttetg
                                                                     1380
gtgaggatgc atgcgtgggg ctgctggtgt ttagagtggg ggctacccaa taaatcactg
                                                                     1440
atact
                                                                     1445
```

```
<210> 5165
<211> 1620
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(1326)
<223> similar to gi4262587 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5165
gqcacqagcc caagcaattc aagacccagc aatactacaa cggcctgaag cagatctgtc
                                                                       60
cagaagtgga gaatgcccag ccaggggcct tgaagagtca gaggctccca gatctgacca
                                                                      120
cagtcatete ggtggatgcc cetttgccgg ggaccetgct cetggatgaa gtggtggcgg
                                                                      180
ctqqcaqcac acggcagcat ctqqaccaqc tccaatacaa ccaqcaqttc ctqtcctqcc
                                                                      240
atgaccccat caacatccag ttcacctcgg ggacaacagg cagccccaag ggggccaccc
                                                                      300
teteceacta caacattgte aacaacteca acattttagg agagegeetg aaactgeatg
                                                                      360
agaagacacc agagcagttg cggatgatcc tgcccaaccc cctgtaccat tgcctgggtt
                                                                      420
ccgtggcagg cacaatgatg tgtctgatgt acggtgccac cctcatcctg gcctctccca
                                                                      480
tetteaatgg caagaaggea etggaggeca teageagaga gagaggeace tteetgtatg
                                                                      540
gtacccccac gatgttcgtq qacattctqa accaqccaqa cttctccaqt tatqacatct
                                                                      600
cgaccatgtg tggaggtgtc attgctgggt cccctgcacc tccagagttg atccgagcca
                                                                      660
tcatcaacaa gataaatatg aaggacctgg tggttgctta tggaaccaca gagaacaqtc
                                                                      720
ccgtgacatt cgcgcacttc cctgaggaca ctgtggagca gaaggcagaa agcgtqqqca
                                                                      780
gaattatgcc tcacacggag gcccggatca tgaacatgga ggcagggacg ctggcaaagc
                                                                      840
tgaacacgcc cggggagctg tgcatccgag ggtactgcgt catgctgggc tactggggtg
                                                                      900
agecteagaa gacagaggaa geagtggate aggacaagtg gtattggaca ggagatgteg.
                                                                      960
ccacaatgaa tgagcagggc ttctgcaaga tcgtgggccg ctctaaggat atgatcatcc
                                                                     1020
ggggtggtga gaacatctac cccgcagagc tcgaggactt ctttcacaca cacccgaagg
                                                                     1080
tgcaggaagt gcaggtggtg ggagtgaagg acgatcggat gggggaagag atttgtgcct
                                                                     1140
gcattcggct gaaggacggg gaggagacca cggtggagga gataaaagct ttctgcaaag
                                                                     1200
ggaagatete teaetteaag atteegaagt acategtgtt tgteaeaae tacceettea
                                                                     1260
ccatttcagg aaagatccag aaattcaaac ttcgagagca gatggaacga catctaaatc
                                                                     1320
tgtgaataaa gcagcaggcc tgtcctggcc ggttggcttg actctctct gtcaqaatgc
                                                                     1380
aacctggctt tatgcaccta gatgtcccca gcacccagtt ctgagccagg cacatcaaat
                                                                     1440
gtcaaggaat tgactgaacg aactaagagc tcctggatgg gtccgggaac tcgcctgggc
                                                                     1500
acaaggtgcc aaaaggcagg cagcctgccc aggccctccc tectqtccat cececacatt
                                                                     1560
eccetgtetg teettgtgat ttggcataaa gagettetgt tttetttggc aaaaaaaaaa
                                                                     1620
```

```
<210> 5166
<211> 711
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(712)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (406)...(226)
<223> similar to gill09915 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5166
aatacattgg cgggcgtagt acttattgtg ctcgtcaaac ttgagttcct gaatgacatc
                                                                       60
tgggtacttg agtagccgca gcaggatctt ctctgatatc atggaggggc taaactgaga
                                                                      120
gacctctgtg gctaggaagc gatgagcggc caggaggagc tgcggggaga ttttcacttt
                                                                      180
gageteattg teegeateet tgaaggeaga gaagteaege ttgttettet cagacaceeg
                                                                      240
cttccggctt cggttgtcag tgtacatgtc ggactcgtcc aggatctccg acttgatgat
                                                                      300
ctcctcgatc acgtcctcca gggtgaccag gcccaggacc tcgtagaagg ggtcaccctc
                                                                      360
accetegttg tttacettet geacgatgge caggtgggae tteccagete cagetgettt
                                                                      420
ttctcatggg gaaaagccag gggccccaga gcagaccagg gactcccacc acccaagaag
                                                                      480
gagteetetg catettaete aatgagtete ecaggaaggt ecageetetg agateecagg
                                                                      540
ggcccaggat gttcccgcgc tctcaggccc tcccatggga gaggtgcggg caggactgac
                                                                      600
tggaagccac aggettggge caaagtecac acaaacagat agetgagcac eetgatttet
                                                                      660
tgcgnncggg tggntcgncg cnannttngg ngnatgntnc aggaggtcct t
                                                                      711
```

```
<210> 5167
<211> 549
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(395)
<223> similar to gi407139 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5167
cgcctttgta gaaatgagtt ccagcagctt tatgggaata tctaatatga cacaactgga
                                                                       60
aagctcaact agtaaaatgc ttaaagcagg cataagagga attccgccta aaattgaagc
                                                                      120
tettecatet gatateagea ttgatgaagg caaagtteta acagtageet gtgettteae
                                                                      180
gggtgagcct accccagaag taacatggtc ctgtggtgga agaaaaatcc acagtcaaga
                                                                      240
acaggggagg ttccacattg aaaacacaga tgacctgaca accetgatca tcatggacgt
                                                                      300
acagaaacaa gatggtggac tttataccct gagtttaggg aatgaatttg gatctgactc
                                                                      360
tgccactgtg aatatacata ttcgatccat ttaagagggc ctgtgccctt atactctaca
                                                                      420
ctcattctta acttttcgca aacgtttcac acggactaat ctttctgaac tgtaaatatt
                                                                      480
taaagaaaaa aaaagtagtt ttgtatcaac ctaaatgagt caaagttcaa aaatattcat
                                                                      540
ttcaatctt .
                                                                      549
```

```
<210> 5168
<211> 1101
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (247)...(868)
<223> similar to gi5824602 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5168
gaccacgcca agettggcae gaggecagaa eetgaaaagt gteagagegt atetteaget
                                                                       60
ggtgaacttg aaacagaaaa ctatgaaaga gacagcttgc tagcaactgt tccagatgag
                                                                      120
caggattgtg ttactcaaga agtgccagac tcccgccagg cagaaactga agctgaagtg
                                                                      180·
aaaaagaaga agaacaagaa gaagaacaaa aaggtgaatg gtctgcctcc tgaaatagct
                                                                      240
getgtteetg agetggeaaa atactgggee eagaggtaca ggetettete eegttttgat
                                                                      300
                                                                      360
gatgggatta agttggacag agagggctgg ttttcagtta cacccgagaa gattgctgaa
                                                                      420
cacattgctg gccgtgttag tcagtccttc aagtgtgacg ttgtagtaga cgcattctgt
                                                                      480
ggagttggag gaaataccat tcagtttgcc ttaacaggaa tgagagtgat tgccattgat
ategateetg ttaagattge eettgetege aataatgeag aagtttatgg gatageagat
                                                                      540
aagatagagt teatetgtgg agatttettg etgetggett ettttttaaa ggetgatgtt
                                                                      600
gtgttcctca gcccaccttg gggagggcca gactatgcca ctgcagagac ctttgacatt
                                                                      660
agaacaatga tgtctcctga tggctttgaa attttcagac tttctaagaa gatcactaat
                                                                      720
aatattgttt attttcttcc aagaaatgct gatattgacc aggtggcatc cttagctggg
                                                                      780
cctggagggc aagtggaaat agaacagaac ttccttaaca acaaattgaa gacaatcact
                                                                      840
                                                                      900
gcatattttg gtgacctaat tegaagacca geetetgaaa eetaactatg cageagtgeg
aggacaaaag atcatggagt ggtcaaaata ttcagatgag acatttggca tgtcttcctt
                                                                      960
tattcactga tattttctac ccatggtctt atatcaccgt atgaaatgga aacttacagg
                                                                     1020
acttaaatat cagtgaaata ttttgagatc tttgaataat teetttagag gaattataca
                                                                     1080
aaattaatat atatgagtcc t
                                                                     1101
```

```
<210> 5169
<211> 2237
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (63)...(839)
<223> similar to gi3043598 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5169
cgacgcgcgc tgcggacccg gctcgaccca cgcgtacgcg gacgcgtggg cggacgcgtg
                                                                       60
ggcgccagca ttcgctcaag aagtcccgca tggagaatga catggcccag tctctccaca
                                                                      120
gtgacacggc tgatgacact gcccatcgcc ctggcaagag caacctcaag ctgccaaagg
                                                                      180
gcatteteaa gaagaaggtg teageetetg cagaaggggt acaggaggae ceteeggage
                                                                      240
tcagcccaat ccctgcgagc ccagggcagg ctgccccct gctccccaag aagggcattc
                                                                      300
tcaagaagcc ccgacagcgc gagtetgget actactecte teccgagecc agtgaatetg
                                                                      360
gggagetett ggaegeaggt gaegtgtttg tgagtgggga teccaaggag cagaageete
                                                                      420
cgcaagette agggeteete etecategea aaggeateet caaacteaat ggcaagttet
                                                                      480
cccagacage ettggagete geggeececa ccacettegg etceetggat gaactegeee
                                                                      540
cacctegece cetggecegg gecageegae ceteagggge tgtgagegag gacageatee
                                                                      600
tgtcctctga gtcctttgac cagctggact tgcctgaacg gctcccagag cccccactgc
                                                                      660
ggggctgtgt gtctgtggac aacctcacgg ggcttgagga gccccctca gagggccctg
                                                                      720
```

```
gaagetgeet gaggegetgg eggeaggate etttggggga eagetgettt teeetgaeag
                                                                   780
                                                                   840
actgccagga ggtgacagcg acctaccgac aggcactgag ggtctgctca aagctcacct
                                                                   900
gagtggagta ggcattgccc cagcccggtc aggctctcag atgcagctgg ttgcaccccg
                                                                   960
aggggagatg cettetecee caceteceag gacetgeate ceageteaga aggetgagag
ggtttgcagt ggagccctga gcagggctgg atatgggaag taggcaaatg aaatgcgcca
                                                                  1020
agggttcagt gtctgtcttc agccctgctg aacgaagagg atactaaaga gaggggaacg
                                                                  1080
ggaatgcccg cgacagagtc cacattgcct gtttcttgtg tacatggggg ggccacagag
                                                                  1140
acctggaaag agaactctcc cagggcccat ctcctgcatc ccatgaatac tctgtacaca
                                                                  1200
tggtgccttc taaggacagc tccttcccta ctcattccct gcccaagtgg ggccagacct
                                                                  1260
                                                                  1320
ctttacacac acattcccgt tcctaccaac caccagaact ggatggtggc acccctaatg
tgcatgaggc atcctgggaa tggtctggag taacgcttcg ttatttttat ttttattttt
                                                                  1380
atttatttat ttattttttt gagacggagt ttcgctcttg gtgcccaggc tagagtgcaa
                                                                  1440
tggcgcgate teageteace teaaceteeg cetecegggt teaagegatt eteetgeete
                                                                  1500
agecteecta gtagetggga ttacaggege eegecaccat geeeggetaa ttttgtattt
                                                                  1560
ttagtagaga cagggtttct ccatgttggt caggctggtc tcaaactccc gacctcaggt
                                                                  1620
                                                                  1680
gatecaceca ceteggeete ecaaagtget gggattacag gegtgageca cegegeecea
cctaaccett ccttatttag cctaggagta agagaacaca atctctgttt cttcaatggt
                                                                  1740
                                                                  1800
tetetteeet tttecateet ecaaacetgg cetgageete etgaagttge tgetgtgaat
ctgaaagact tgaaaagcct ccgcctgctg tgtggacttc atctcaaggg gcccagcctc
                                                                  1860
ctctggactc caccttggac ctcagtgact cagaacttct gcctctaagc tgctctaaag
                                                                  1920
tecagaetat ggatgtgtte tetaggeett eaggaeteta gaatgteeat atttattttt
                                                                  1980
                                                                  2040
atgttcttgg ctttgtgttt taggaaaagt gaatcttgct gttttcaata atgtgaatgc
tatgttctgg gaaaatccac tatgacatct aagttttgtg tacagagaga tatttttgca
                                                                  2100
2160
cctaatggtc tctacctaat ggacctccgt ggccaaaaag taccattaaa accagaaagg
                                                                  2220
                                                                  2237
tgattggaaa aaaaaa
```

```
<210> 5170
<211> 1462
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(618)

<223> similar to gi736727 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5170
actagateta gatetettta atgecattet gategaaaeg eeattagete eattetteea
                                                                       60
agactgcatg totgaaaatg ototagatga actgaatatt gaattgctac gcaataaact
                                                                      120
atacaagtot taccttgagg cattotataa attotgtaag aatcatggtg atgtcacago
                                                                      180
agaagttatg tgtcccattc ttgagtttga ggccgacaga cgtgctttta tcatcactct
                                                                      240
taactccttt ggcactgaat tgagcaaaga agaccgagag accctctatc caaccttcgg
                                                                      300
caaactctat cctgaggggt tgcggctgtt ggctcaagca gaagactttg accagatgaa
                                                                      360
gaacgtagcg gatcattacg gagtatacaa acctttattt gaagctgtag gtggcagtgg
                                                                      420
gggaaagaca ttggaggacg tgttttacga gcgtgaggta caaatgaatg tgctggcatt
                                                                      480
caacagacag ttccactacg gtgtgtttta tgcatatgta aagctgaagg aacaggaaat
                                                                      540
tagaaatatt gtgtggatag cagaatgtat ttcacagagg catcgaacta aaatcaacag
                                                                      600
ttacattcca attttataac ccaagtaagg ttctcaaatg taaaaaatta taaatgttaa
                                                                      660
```

```
aaggaagtta ttgaagaaaa taaaagaaat tatgttatat tatctagact acacaaaagt
                                                                 720
                                                                 780
aaqccacact atatcttcat gagttgcaaa tccatggaaa cacagtaaac cagccctgaa
                                                                 840
acaaagcatt tccttgtttt cagtggtatt agatcttgtt tccacatgtc tgtctcattc
                                                                 900
ttcactgggc cttacaggtt agttttaatt aactctatgg tatttttctt attcttgttt
                                                                 960
gatcatgtta aaaattggac ctaataaaag tattttattc ttgcttttcc atgcttctct
                                                                1020
acaggtccaa atactgaatg tctcctttac tttttctctt ttaaattttt ttctagacag
                                                                1080
ggtctcactc tgtcacctag gctacagtgc agtggtgtga tcacagctca ctgcagcctc
gacttcccag gctcaagtga tcctcccagc tctcagcctc caaagtagct ggcactacaa
                                                                1140
                                                                1200
gtgtacaccc ccacacaagg ctaagttttg tattttttgt agagacaggg tttcaacata
                                                                1260
ttatccaggc tggtgtcgaa ttcctgggct ccagggatcc acagtccccc ttggcctccc
aaagtgetgg gattacatge atgageeact gtgetggget teatttacat tttaactgte
                                                                1320
                                                                1380
tgttccttgc ctagattcac agaaatccaa agctgtatgt agtcaacatg gttcacaagt
1440
ttccctctgt cgcccaagct ag
                                                                1462
```

```
<210> 5171
<211> 2287
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1727)
<223> similar to gi5868898 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5171
atgagegeeg ceacecacte geceatgatg caggtggegt ceggeaaegg tgacegegae
                                                                       60
cetttgcccc ceggatggga gatcaagatc gaccegcaga ceggetggcc cttettegtg
                                                                      120
gaccacaaca geegeaceae taegtggaae gaccegegeg tgeeetetga gggeeecaag
                                                                      180
gagactecat cetetgecaa tggccettee egggaggget etaggetgee geetgetagg
                                                                      240
                                                                      300
gaaggccacc ctgtgtaccc ccagctccga ccaggctaca ttcccattcc tgtgctccat
gaaggegetg agaaceggea ggtgeaceet tteeatgtet atecceagee tgggatgeag
                                                                      360
cgattccgaa ctgaggcggc agcagcggct cctcagaggt cccagtcacc tctgcggggc
                                                                      420
atgccagaaa ccactcagcc agataaacag cgtggacagg tggcagcggc ggcggcagcc
                                                                      480
cagececcag ceteceaegg acetgagegg teccagtete cagetgeete tgaetgetea
                                                                      540
                                                                      600
tecteatect ceteggeeag cetgeettee teeggeagga geageetggg cagteaceag
etcccgcggg ggtacatete cattccggtg atacacgage agaacgttac ccggccagca
                                                                      660
geocagecet cettecacea ageocagaag aegeactace cagegeagea gggggagtae
                                                                      720
cagacceace agectgtgta ccacaagate cagggggatg actgggagee ceggeeeetg
                                                                      780
egggeggeat cecegtteag gteatetgte cagggtgeat egageeggga gggeteaeca
                                                                      840
gccaggagca gcacgccact ccactccccc tegcccatcc gtgtgcacac egtggtegac
                                                                      900
aggeeteage ageeeatgae eeategagaa aetgeacetg ttteeeagee tgaaaacaaa `
                                                                      960
ccagaaagta agccaggccc agttggacca aaactccctc cgggacacat cccaattcaa
                                                                     1020
gtgateegea aagaggtgga tietaaaeet gtiteeeaga ageeeeeaee teeetetgag
                                                                     1080
aaggtagagg tgaaagttcc ccctgctcca gttccttgtc ctcctcccag ccctggccct
                                                                     1140
tetgetgtee cetetteece caagagtgtg getacagaag agagggeage ceecageact
                                                                     1200
geceetgeag aagetacaee tecaaaaeea ggagaageeg aggeteeeee aaaaeateea
                                                                     1260
ggagtgctga aagtggaagc catcctggag aaggtgcagg ggctggagca ggctgtagac
                                                                     1320
aactttgaag gcaagaagac tgacaaaaag tacctgatga tcgaagagta tttgaccaaa
                                                                     1380
```

```
gagetgetgg coetggatte agtggacece gagggacgag cegatgtgeg teaggecagg
                                                                     1440
agagacggtg tcaggaaggt tcagaccatc ttggaaaaac ttgaacagaa agccattgat
                                                                     1500
gtcccaggtc aagtccaggt ctatgaactc cagcccagca accttgaagc agatcagcca
                                                                     1560
                                                                     1620
ctgcaggcaa tcatggagat gggtgccgtg gcagcagaca agggcaagaa aaatgctgga
aatgcagaag atccccacac agaaacccag cagccagaag ccacagcagc agcgacttca
                                                                     1680
aaccccagca gcatgacaga cacccctggt aacccagcag caccgtagcc tctgccctgt
                                                                     1740
aaaaatcaga ctcggaaccg atgtgtgctt tagggaattt taagttgcat gcatttcaga
                                                                     1800
gactttaagt cagttggttt ttattagctg cttggtatgc agtaacttgg gtggaggcaa
                                                                     1860
aacactaata aaagggctaa aaaggaaaat gatgcttttc ttctatattc ttactctgta
                                                                     1920
                                                                     1980
caaataaaga agttgcttgt tgtttgagaa gtttaacccc gttgcttgtt gttctgcagc
cetytetaet tyggeaceee caccacetyt tagetytygt tytgeactyt ettttytage
                                                                     2040
tctggactgg aggggtagat ggggagtcaa ttacccatca cataaatatg aaacatttat
                                                                     2100
cagaaatgtt gccattttaa tgagatgatt ttcttcatct/cataattaaa atacctgact
                                                                     2160
ttagagagag taaaatgtgc caggagccat aggaatatct gtatgttgga tgactttaat
                                                                     2220
gctacatttt aaaaaaagaa aataaagtaa taatataact caaaaaaaaa aaaagtcgac
                                                                     2280
                                                                     2287
gcggccg
```

```
<210> 5172
<211> 2243
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(750)
<223> similar to gi1256378 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5172 tectecegge cagecaccaa gaccatgaac tttttttgge agagagetga gatettggga 60 geoetggtet etgtactgte catetgggte gtgacggggg taetggtgta eetggetgtg 120 gagcggctga tctctgggga ctatgaaatt gacgggggga ccatgctgat cacgtcgggc 180 tgcgctgtgg ctgtgaacat cataatgggg ttgaccettc accagtctgg ccatgggcac 240 agccacggca ccaccaacca gcaggaggag aaccccagcg tccgagctgc cttcatccat 300 gtgatcggcg actttatgca gagcatgggt gtcctagtgg cagcctatat tttatacttc 360 aagccagaat acaagtatgt agaccccatc tgcaccttcg tettetecat cetggteetg 420 gggacaacct tgaccatcct gagagatgtg atcctggtgt tgatggaagg gacccccaag 480 ggcgttgact tcacagctgt tcgtgatctg ctgctgtcgg tggagggggt agaagccctg 540 cacagootgo atatotgggo actgaoggtg goocagootg ttotgtotgt coacatogco 600 attgctcaga atacagacgc ccaggctgtg ctgaagacag ccagcagccg cctccaaggg 660 aagttccact tccacaccgt gaccatccag atcgaggact actcggagga catgaaggac 720 tgtcaggcat gccagggccc ctcagactga ctgctcagcc aggcaccaac tggggcatga 780 acaggacetg caggtggetg gactgagtgt cocccaggee cagecaggae tttgcctace 840 ccagctgtgt tgtaaaccag gtccccctcc tgacctctgc cccactccag gaatggagct 900 cttcccagcc tcccatctga ctacagccag ggtggggact cagcgggtat aaagctagtg 960 tgaccetget ettecagete etgggecage tetggaaggg etgtatttgg geetaateet 1020 cagcaaatgt tctaccactc gcaggggcaa aggtggtgag ccacgggacg tccaagggga 1080 ggctggcccc agcgcgccca tactgcctgc ctcatgcccc attctcagcc tggctggcct 1140 ttgcctttat gaatctgagc ccctccatct gcctatagca ataggcacgg gggtgaggac 1200 ceteacacte teatitigage etecetigagg cagggageea ggaggeacet gaggeetate 1260

```
tgtgeettag teaetteage tatgageeaa atgtteeett teetggaggg gagaggette
                                                                     1320
ttactaggta agagacaggt ttcctctttc cttatttcct cagctgtgcc aacacaaaaa
                                                                     1380
                                                                     1440
acaactttgg cacaggtggt gggcaggggg tagagagatt tcagcttggg ttctgcacta
acagceteca agececetgg cacttetgtt gecetgagag tgteecaggg gatteagagt
                                                                     1500
ctccagaaag atatggctgg gccaactctg ttgcctacct ggcctgaccc agtcggagcc
                                                                     1560
tgacatggtg gagggaaagg gagacaagtg gggctgcact cggtccagag gccagctagg
                                                                     1620
agggaaaccg cagcttcctg gggcttgtgt gtgaagattc ctgacttagg ggtggctttt
                                                                     1680
gtttacaaga tgcaagaggg gaaacctgtc cccgactcat cgagacaaca tgcccagtta
                                                                     1740
teagggagte etgtgteaca aggtetgtet etgeeattgt aageaagtge ettgggegag
                                                                     1800
etggeetetg eeccacagte teatetgtae accgacaggg ttgatgeete eeteacaggg
                                                                     1860
ttgagaacaa gagccagttg gccaagtacc tgtggttgtt gaagattggt tacttttacc
                                                                     1920
atcctgggga cagggaactc tgtggcccga ggctgcctca ctgaggagtc aggtgggctt
                                                                     1980
cccagcetcc ccaggggcag tgctgagttt gtcttgactg ttctggccca aggtgggagg
                                                                     2040
aggtgggttt ggtcacttgc ctcccacttt aaatctctgt ctttccatct gtgaaatgac
                                                                     2100
ctctttgtgc cttcccagca ctgtcatcct gatcgcctgt gttctaggta gatgggtcct
                                                                     2160
teagecete eaggtetgtg aaaagtetgt ggaaageact ggeetggaga ggggtggggg
                                                                     2220
gttgctggtg ggtgctccat tcc
                                                                     2243
```

```
<210> 5173
<211> 1381
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1382)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1202)...(862)
<221> misc_feature
<222> (1202)...(862)
<220>
<221> misc_feature
<222> (1202)...(862)
<223> similar to gi2984584 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 5173
ttttttttt ttagttttt ttgaatatat ttacaatata aatactaatt tgtttccaaa
                                                                       60
gtacatattc ttttaacaat ttgagaaaat tatctagcat acgacgagta atttaatgta
                                                                      120
aagactctat agtagtgatt aaggaaaaat agaactgttt tggggataag gaatcctggg
                                                                      180
ctatgaatgg gcatgatgat ctgaacttgc aaagggaaag tgaagcagct tcagtccacc
                                                                      240
attggcactg ctaatacaca tatgttaaag gactactatg tgagatagca acctggatat
                                                                      300
ggtgttaata aaaactaaac atgagaggat ataaaaagta cacatgcttg gcataggtgt
                                                                      360
gttactttta aagaagetea acattttatt eteattttea ataaettaaa tgaacageae
                                                                      420
ttaacacatt acacaaaatt aaagacttgt gcatatattt gatttcaaca ttaatgtcaa
                                                                      480
aaatacatag tatgatttta cataggattt gtgctacatt agaacactag agacaaacat
                                                                      540
cacttgagta ttaaggaaaa cattaaatat taaataactg agaaaatgtg taaacactaa
                                                                      600
tctaactggg ggttttgcta ttgcaacatg tccaatgaag tggtttcaac agtacaaaaa
                                                                      660
ggattaggac atgagttttt ccagtctaca tggaatatat ggatttcatt tcaggaatcc
                                                                      720
tttcataaaa actggtccag gataacagga gagaatccac tctcctgatt gttaatttgg
                                                                      780
tacactccat tctatgctaa tttttacttg caaacttggg tactgagtaa atactttaaa
                                                                      840
tcatcactcc ttatcaacat cttggtgaaa actgagggtt tgttggtgat tcagtgtaag
                                                                      900
```

```
atttgagttc atatgcagca ccgctatcaa cctccattga ctttctagag aacaggagcc
                                                                      960
gtacgtetet atggaggtag atetttecag atttagaact etggaacete agatgtatga
                                                                     1020
                                                                     1080
ggtagcgtaa taaccgttct tctgtgtgtc ggatgttctc tttattaaca cttctcttca
cttcttgttt aacaggtaca gaaaaagttc tttgtcgtag gaatgtctga tgattggctg
                                                                     1140
gcatateteg taaateatat ateacaacaa acatetteae cacagtetta ttaggattaa
                                                                     1200
ataaggtcac ttgtattgtt cctgaaggag gtactcgata acccctttta ccaagggact
                                                                     1260
ctaaagtaat nacacccata taaggagagg gagnattgtc atntgaaaca ctgtagaatg
                                                                     1320
                                                                     1380
acacttcaac tggnagagtc aaatgtgtgg ggcagaaagc accacttgcc cctacctcgg
                                                                    1381
```

```
<210> 5174
<211> 1586
<212> DNA
<213> Homo sàpiens

<220>
<221> misc_feature
<222> (1222)...(950)
<223> similar to gi5809683 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5174
aaatgcacat ctcatggcag ctaagccaca tggctgggat ttaaagcctt tagagccagc
                                                                       60
ccatggettt agetacetca ctatgetget teacaaacet tgeteetgtg taaaactata
                                                                      120
ttctcagtgt agggcagaga ggtctaacac caacataagg tactagcagt gtttcccgta
                                                                      180
ttgacaggaa tacttaactc aataattett ttetttteca tttagtaaca gttgtgatga
                                                                      240
ctatgtttct attctaagta attcctgtat tctacagcag atactttgtc agcaatacta
                                                                      300
agggaagaaa caaagttgaa ccgtttcttt aataatgctg atctactttt tgttgaattt
                                                                      360
gtattttatt tcaagtgtca aagaaatcat ctttgtttat ttagatgaaa ccaaacacta
                                                                      420
cacatttaca ctcacactgc ttccaggacc caagggtttc acagaccatt tgcctacctg
                                                                      480
gttctttcct ctcctcttc cagtgatttc tagaataccc tttcaaagga ccacatgaat
                                                                      540
atacgaactg taaaattcaa ctttgatctt ttgcgaaatg ttttatttac tgcttaaaat
                                                                      600
ctaggtgggt ggatatattc atgtatgcat atattgatag attaatacaa acataagtat
                                                                      660
gtatttaaat tgaaggataa gtaaagtgag agtacaacag ccccattctt agttaaaaag
                                                                      720
aaaagaaaaa gacaagagca agccactgcc accacaggta ccaqcactta aatttqtcaq
                                                                      780
caggetgace aaagagtgge etgtetgttg geatteateg gacatggeag etceetteag
                                                                      840
etetecagtg agtiticaagt teagageact ticagteett gietigitta tetattaetg
                                                                      900
aagggtttct aggaaggttt agcagtgctt caattttctt agcatcattc tcaggttcat
                                                                      960
cttcctgtaa actactttca attttctcag ggaggtgctc agtaacttgt agtctgcctt
                                                                     1020
tecactette cagittitage teatggagig cettiegate etteigitti ettieetgaa
                                                                     1080
cagteteace agagtaette tgaaatgeea teageaggee teetacagga gtgeecagea
                                                                     1140
aggetecaat tatgecaeca gecaecagge caegeaggee taegtttate etaaaaagae
                                                                     1200
ttcccgtgac agtetttgcc aaacagetec eggaggeggt eccatecaga ttccgggtaa
                                                                     1260
tagggetetg ggaegtaggg aageegette tgaegeteet caaggaette egaateggea
                                                                     1320
gtcacagett eggcageaaa gaetegggga aataggeaca atgetetaca gagaaagete
                                                                     1380
egeggtgeeg gtggeggeac etecatggee ttetetegae etaeggaeaa aettgagege
                                                                     1440
traggartte aagteetege ggargtgeeg egggagageg taactgtacg aggtgagaat
                                                                     1500
cegtgeattt gacceaggtt aaccetetge cagagggete gacacecaca cetteagtee
                                                                     1560
ccggcctcgc tttgcggacg cgtggg
                                                                     1586
```

```
<210> 5175
<211> 1139
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1113)...(547)
<223> similar to gi3876299 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5175
tttttttttt taaaaatgtt agaaaaaaac atttattgac atgaaaaggg gtttcaaata
                                                                       60
tactgatttg tcaaacaaat agtaaaacaa catagagtaa tgattcattt tggtaaaaaa
                                                                      120
tatatatgta tatatagaaa aaaaaattct gcaaggacat atgctaaatt ggtaacagtg
                                                                      180
cttacccctg ggaagggggt atacagatgt tgatttactc tttgggtacc tgtatttccc
                                                                      240
agtttttcta taaatcacat catttgcttc tgtcataaga aaaaataata tctattatca
                                                                      300
tcctttattt tgatcaaaac aaatcaattt tttaaaaaat cttaggtttt tttaagaagc
                                                                      360
agaaataatt tecaaattge etecagagae aatgatttta teetetgeag aagetggtea
                                                                      420
gaacettett gateacagee eeagttagat acagggaaga atggegette etacagette
                                                                      480
ageggeetea geteagetet gtgeeceaag gecaaaceag eteateteea geeceateea
                                                                      540
tectattett getgagteac cagteteate atetteagag ceatgteece ttggteagaa
                                                                      600
ggaaccatat gaccagettt cagaatccag tagaaagcaa ggttettgta ggaettgaca
                                                                      660
aaagcagatg tttccaaaga tttagggtca ctgtacaggg ccttccactt cagctgactg
                                                                      720
aatttaggca gttctggcca cttcagtttc cgcacccagg cctcctgacc catggtatct
                                                                      780
acgatgagat ccagctgtcc attatacacc gtcacgttga tccctgcctc cagcaactcg
                                                                      840
tecacaatge taatgaetgg etteatgaag teeteeteea tgtteacaaa gaegttggta
                                                                      900
geotggeete eccaggattg ateeteagga ataattttga gettetttet gatggggeea
                                                                      960
ttcatgagct ggcttaaggc atctcgttgt aggtgtctca cgtggcgctg acaaagacaa
                                                                     1020
actaggtggc tctgtgtgaa ttctagactc gactccattg tagacgtggg agtgctttta
                                                                     1080
gttaagatgt tatagaagtt caccccatct gtcccttctg tcgtcttctc gcagccgta
                                                                     1139
```

```
<210> 5176
<211> 1397
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (298)...(1011)
<223> similar to gi264 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5176
                                                                       60
ctcagagcgg tggaattcga acgcttttga aagcgaatca ggaaattact tatcaatctg
aagccccata taattatgaa taatcctcgc tgccaaaggg aaggggattt tgagcaaaag
                                                                      120
                                                                      180
ctccacatct gcgcacacta gagttcaaag actccagctg ttggaaggtc ttgtgagcaa
                                                                      240
gagccaaaga tgtttgtctt gctctatgtt acaagttttg ccatttgtgc cagtggacaa
                                                                      300
ccccggggta atcagttgaa aggagagaac tactccccca ggtatatetg cagcattcct
                                                                      360
qqcttqcctq qacctccagg gccccctgga gcaaatggtt cccctgggcc ccatggtcgc
atcggccttc caggaagaga tggtagagac ggcaggaaag gagagaaagg tgaaaaggga
                                                                      420
actgcaggtt tgagaggtaa gactggaccg ctaggtcttg ccggtgagaa aggggaccaa
                                                                      480
ggagagactg ggaagaaagg acccatagga ccagagggag agaaaggaga agtaggtcca
                                                                      540
attggtcctc ctggaccaaa gggagacaga ggagaacaag gggacccggg gctgcctgga
                                                                     . 600
gtttgcagat gtggaagcat cgtgctcaaa tccgcctttt ctgttggcat cacaaccagc
                                                                      660
                                                                      720
tacccagaag aaagactacc tattatattt aacaaggtcc tettcaacga gggagagcac
tacaaccctg ccacagggaa gttcatctgt gctttcccag ggatctatta cttttcttat
                                                                      780
gatatcacat tggctaataa gcatctggca atcggactgg tacacaatgg gcaataccgg
                                                                      840
                                                                      900
ataaagacct tcgacgccaa cacaggaaac catgatgtgg cttcggggtc cacagtcatc
                                                                      960
tatctgcage cagaagatga agtctggctg gagattttct tcacagacca gaatggcctc
tteteagace caggttggge agacagetta tteteegggt ttetettata egttgacaca
                                                                     1020
                                                                     1080;
gattacctag attccatatc agaagatgat gaattgtgat caggaccaag atccctgtgg
taaacactct gattgaatct ggggttccag aaggtggaac aagcaggaat gggatccaaa
                                                                     1140
gagactecca eteagattet aaageattta aagacaatte tageagaatt tateaaaaca
                                                                     1200
agatgaaaca cagaaaagtt gaaaccacaa caaaatgaat totattaaag aatagcccca
                                                                     1260
gatataaatt ctcttgaaag caatgttcat aaatatttaa gcaaattaaa gacaatgtta
                                                                     1320
                                                                     1380
acaaattttc tattaaatgc cctgagtgat aaaaccagtt ggcaataata ttgccttatt
                                                                     1397
aaatcttcaa aaaataa
```

```
<210> 5177
<211> 1096
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (19)...(650)
<223> similar to gi3882225 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5177
                                                                       60
gtcagtgtgg tggaattcgg ctctgtgaag aaaagggtat gctttccatc agaagatcat
ctagaggagt ttatagcaga acatetecet gaagcateca ateagagtet ceteaetgtt
                                                                      120
geceatgeag acaeaggeat ceaaaceaac ggtgacetgg aagaeetgga ggageatggg
                                                                      180
ccagggcaga cagtetetga ggaagecaca gaagtteaca tgatggaggg ggaeecagae
                                                                      240
acactggccg aacttctgat cagggatgta cttcaggagc tgtccagtta caacggcgag
                                                                      300
                                                                      360
gaggaggacc cagaggaggt gaagacatcc ttgggagttc cacaacgtgg tgacctggaa
gacctggagg agcatctgcc agggcagaca gtctctgagg aagccacagg ggttcacatg
                                                                      420
atgcaggtgg acccagccac accggcaaag aaattggaag actccaccat tacaggcagc
                                                                      480
caccagcaga tgtcagcaag tccttcctct gcacctgcag aagaagcaac agaaaagacc
                                                                      540
aaagtggaag aggaagtgaa aaccagaaag cccaagaaga aaaccaggaa gcccagcaag
                                                                      600
aaaagccggt ggaatgtcct gaaatgttgg gacattttta atatatttta gagacctctg
                                                                      660
aagatteete gaceaceagg aagggeeeg aegtggggat gteaacatgg eteagaettg
                                                                      720
```

```
atgtggatcg tgatcatttc gggaaatgtg ttactccaaa aacttttata atctttgctt 780 aatttgttt taaatacttt cctggctggg cgtggtggct tatgcctgta atcccagcac 840 tttgggaggc cgaggcgggt ggatcacctg aggtcaggag ttcaagacca gcctggccaa 900 caaggtgaaa ccccgtctct actaaaaata caaaaattag ctaggcgtgg tggcgcactc ttgtagtccc agctatttgg gaggctgagg caggagaatc acttgacctc aggaggcgga 1020 ggttgcagtg agccgagatc atgccactgc accccagcac ctggctacag agtgagactt 1080 tgtctcaaaa aaaaaa
```

```
<210> 5178
<211> 1108
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1108)...(381)
<223> similar to gi2650265 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5178
titttttggg aggtacaatt ttaaaaataa tacactagat acgtttttcc taaagcagta
                                                                       60
gatgacattc aataagccat gttatagata actaataaca atgctaacag ggtcaaacca
                                                                      120
aaaaaaaggc acaggtcttt cacatgtttt cattagattt gtttaggcca agttttacaa
                                                                      180
                                                                      240
ttcacatctc cattttggca agtaatttcc tactgcaaat atttatttct gagaaacaac
tcaaataatt taatttcaat taagaaatta aatcaactca aaataggaat aagacaaact
                                                                      300
cattatgett getteageat treettetae egtgeecaaa aatgetgggg tetteaattg
                                                                      360
                                                                      420
gtaaaagtta tettgtatgg ettgecattg acaatggeag ataaagetga tegggggate
ttgccagatc tggttttggg tagctgtttg acaaacactg catttcgaaa agcagccaca
                                                                      480
gggccaatgt totgtotaac gtgtttcaca atttottcca aaacttgctc ctctgttgca
                                                                      540
tttatatett tteteaatae acagagtget aaggggaeat gaeettttaa gggatettee
                                                                      600
                                                                      660
ttqccaacaa cagcacagte tgccacggta ccatgggaaa ggattgacte ttcaatggcg
                                                                      720
cctgcagaaa ttctgtgacc tgcaacattt attacatcat ccactcgaga cataacatac
                                                                      780
aaatageett etteateeat gtaaceagea teeatggtat cataatatee aggaaatttt
tcaaaqtata aatqcttqaa tqcttcctqa ttcttccaga gtcctgaaaa agccccaggt
                                                                      840
ggcaatggta actttaccac aatatttcct aaacaccgag ccttcagttt ttgcatgttg
                                                                      900
tcatccaaaa tcataacatt gtatcctggg acgctttttc ctgcttgccc tggtggaggt
                                                                      960
                                                                     1020
gttttagaat tgcctaatcc aacacatgac gcagtaattg gagatccagt ctcagtttgc
                                                                     1080
caccaatggt ctaagacagg tactctgaag acatttttgg accattccag ggtctctaca
                                                                     1108
tcacatcgtt ctccagccga attccacc.
```

```
<210> 5179
<211> 1025
<212> DNA
<213> Homo sapiens
```

```
<221> misc_feature
<222> (14)...(244)
<223> similar to gi3777621 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5179
tctctagtcc gtgcggtgga attcggagct gggcctccgg gactccgaca tggactacat
                                                                       60
ccagacggat gccatcatca actacgggaa ctccggggga ccactggtga acctggatgg
                                                                      120
cgaggtcatt ggcatcaaca cgctcaaggt cacggctggc atctcctttg ccatccctc
                                                                      180
                                                                      240
agaccycatc acacgyttcc tcacagagtt ccaagacaag cagatcaaag cccctcact
ggcagttcat tgagagcagg gggcttcctc acgtttcccc ctcctccatg accccgtcag
                                                                      300
ccaagcacat ggaccccagt gcagccaagg ctggtgccat gagggctggt cacatgaaga
                                                                      360
                                                                      420
gctgctgttg aggatgccgc cattgttctt ctgtgtccat tatgggaaga caatctggag
                                                                      480
ccaggcagag cctgtctttc ccaaagaagc tgaagtcttc ttctcttgaa cagtggggac
                                                                      540
catchaatct cttgagccct tttcctgttg gcttctagga agctcagagc tagattcagg
                                                                      600
ggtgcaccca gacctgtcct agcatgctcc tttccctaat gaccgagtct ttcctgttga
attateceat tetecatggg tgeetttgae tttggeetee ttaetggaaa ttageggage
                                                                      660
                                                                      720
tgctgtttgc acacactgag ctgtgaggtg gctttccttg gaagtggatg atagtgtcct
cttcccttct tgcctctctc tttctcctga gacaggatcc ccctggggcc taggtttgct
                                                                      780
cctttgttgt acaggggctg teccagttag tgctgacett cateccagaa ceceetggga
                                                                      840
                                                                      900
aaatatcccc tgtcctcaga gctgtgttcc cctccccaag gacagtgcag acttaactga
gggagcctga taaaccttag ctgcatggca caattgcaat tttaaaatcc tttcttgaag
                                                                      960
                                                                     1020
ttgattggtg tttgtaattt gcttctcttt tttatttaat aaaatccaat gatccaaaaa
                                                                     1025
aaaaa
```

```
<210> 5180
<211> 1401
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (31) . . (697)
<223> similar to gi454325 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5180
                                                                       60
cgagaccact agtccagagc ggtggaattc gagagacagt atgaatgcca cgaatgtggg
                                                                      120
aaagccttca accagaaatc aatactcatt gttcatcaga aaattcatac aggagagaaa
                                                                      180
ccctatgtat gcactgagtg tggaagagct ttcatccgca agtcaaactt tattactcat
caaagaattc atactggaga gaagccttat gaatgcagtg actgtgggaa gtcctttacc
                                                                      240
tccaagtctc agctcctggt gcatcagcca gttcacacag gagagaaacc ctatgtgtgt
                                                                      300
                                                                      360
gccgagtgtg ggaaagcctt tagtggcagg tcaaatctca gtaagcacca gaaaactcat
                                                                      420
accggagaaa agccctacat ttgttctgaa tgtgggaaga cctttcgaca gaagtcagag
                                                                      480
ttgattacac atcacagaat tcatactgga gagaaacctt atgagtgcag tgactgtggg
aagtetttea etaaaaaate acageteeaa gtgeateage gaatteacae tggagagaag
                                                                      540
                                                                      600
ccttacgtgt gtgctgagtg tgggaaggcc tttagcaaca ggtccaattt gaataaacat
```

```
cagacaacac acactggaga caaaccctac aagtgtggca tctgtgggaa aggcttcgtt
                                                                      660
cagaaatcag tgttcagcgt ccatcagagc agccacgctt gagagaaaca gtgtgagaaa
                                                                      720
acccccctga gggttgggtc tgattgtaca ctgttgcacg catgcagcag aaaaatatgt
                                                                      780
atattattgt aaatagaaat gaccacatca gaatgtcaca catggctgtt ctggagaggg
                                                                      840
cctctgagaa ggcactgaat gaggcgaggg accettecta cattgtcacc atccccagta
                                                                      900
aaccttgggt cattattcat actgacaagg aaccgagtca atttggtgaa taggaaaagc
                                                                      960
cttctcatga aaactacaat agaatactgt taccaaattc ttcctaagaa agatcgtatt
                                                                     1020
                                                                     1080
aagttaacga taatcctgtt tactgtggat taggtatagt gccaacaaat tgaatgataa
aacaacataa tacgtagtta ttttgatagt gatgaatcct aagttatgtg agttgttcgt
                                                                     1140
tgtggaacac attgtgtaac agactcctgg gtgtttttct ttctcattcg aatctaccac
                                                                     1200
agttggtcat atccaaccct cattcagtat ttctatcaag aaagagatgc tacaaaaaa
                                                                     1260
aaaaagaaaa aacctttttt gtttccaaac ttaaccctca aatggttggt tgggcccct
                                                                     1320
ttggttttaa caaaaattgg cccccccta ttaatctaca aggagtgggt ttaaccctaa
                                                                     1380
gggcccttaa cctttttggg g
                                                                     1401
```

```
<210> 5181
<211> 1650
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1652)...(1538)
<223> similar to gi180249 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5181 cccacgegte egtetacatg gttgtcaaat etgttgaatt gatgtcagte taccagtate 60 ctgaaaagtc tcagcaggca gtactcacgc cacaattttt gcacgtcatt acaagtaaca 120 acctgcagtg tttcactgtg cggtgcagtg cggcggcagc tcgtgaggag gacccgtaca 180 tggacaccac cetgaagget tgeccacetg teagtatgga tgtetgtget ttaagaatac 240 agetttteat aggettgaaa gecatetgte aetttaaaaa ecacateata ettttgaeta 300 aagcagaacc tgaagccatt ccagagagaa gacagtcacc caagaggctt ctttcgagaa 360 aagataccag tgttaaaatc aaaatacctc ctgtagctga ggctgggtgg aatttgtata 420 ttgtgaatac gatctcacca gagcaactgt aacaaagaga tggtagacta tagcaatacc 480 tataagactg tcaaaaccca gagetgcatt cacettetca gtgaggetca tetgttagtg 540 cgagctggcc tgatggatgc cagtcagctg gaacctggag agaaggcaga gcttttggaa 600 gcatttaagg aaagctgtgg gcaccttggg gactgttaca gcaggcttga ctcccagcat 660 teteatetea eettgeeata etataagatg tetggtttgt etatggetga agttetggee 720 cgcacggact ggacagtaga ggatggatta cagaaatacg agagaggatt aatcttttac 780 attaatcatt cactttatga aaacctggat gaagaattaa atgaagaatt agcagcaaaa 840 gtggttcaga tgttttatgt ggctgagcca aagcaagtgc cccatattct ctgtagtcct 900 tctatgaaga atattaatcc tttaactgcc atgagctatc taaggaagct ggatacttct 960 gggttttcat cgatcttagt gacattgacc aaggcagcag tggctctgaa aatgggagat 1020 cttgacatgc acagaaatga aatgaaaagc cattcagaga tgaagttggt atgtggcttc 1080 attetggaac eteggetgtt gatteaacag agaaagggac agattgttee aaccgagett 1140 gcacttcact tgaaggaaac tcagcctgga ttgcttgtgg cttcagttct gggcttgcag 1200 aagaacaaca aaattggaat tgaagaagca gattcctttt ttaaggtgct ttgtgctaag 1260 gatgaagata caatteetea getettggta gaettttggg aageteaget agtggeatgt 1320 ctcccagatg tggtacttca ggaactcttt ttcaaactca catcacagta catctggaga 1380

```
ttgtctaagg aggcagcete etgacaccae accattgega acateggagg atettattet 1440 cetggtcatt eettggtaga tatttggaat aaaataatea cactgactgt gattgggtag 1500 ateacattee atatteteet gtgagtetea gaagatgett eattttgtag aaeggtgtaa 1560 gtggttteea tteeageatg aatgtggteg gteacatgge agtggagtaa eeaaatteea 1620 ggtgttettg gaaacattte tagggtttgg 1650
```

```
<210> 5182
<211> 1069
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (24)...(718)
<223> similar to gi535185 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5182 ctgatcttaa ggataccatt ggctctgtca ccaaaacacc gagtggttta tacataattc - 60 acccagaagg atctagctac ccatttgagg taatgtgtga catggattac agaggaggtg 120 gatggactgt gatacagaaa agaattgatg ggataattga tttccagagg ttgtggtgtg 180 attatetgga tggatttgga gatettetag gagaattttg getaggaetg aaaaagattt 240 tttatatagt aaatcagaaa aataccagtt ttatgctgta tgtggctttg gaatctgaag 300 atgacactct tgcttatgca tcatatgata atttttggct agaggatgaa acgagatttt 360 ttaaaatgca cttaggacgg tattcaggaa atgctggtga tgcattccgg ggtctcaaaa 420 aagaagataa tcaaaatgca atgcctttta gcacatcaga tgttgataat gatgggtgtc 480 gecetgeatg cetggteaat ggteagtetg tgaagagetg eagteacete cataacaaga 540 ccggctggtg gtttaacgag tgtggtctag caaatctaaa tggcattcat cacttctctg 600 gaaaattget tgeaactgga atteaatggg geaegtggae caaaaacaae teacetgtea 660 agattaaatc tgtttcaatg aaaattagaa gaatgtacaa tccatatttt aaataatctc 720 atttaacatt gtaatgcaag ttctacaatg ataatatatt aaagattttt aaaagtttat 780 cttttcactt agtgtttcaa acatattagg caaaatttaa ctgtagatgg catttagatg 840 ttatgagttt aattagaaaa cttcaatttt gtagtattct ataaaagaaa acatggctta 900 ttgtatgttt ttacttctga ctatattaac aatatacaat gaaatttgtt tcaagtgaac 960 tacaacttgt cttcctaaaa tttatagtga ttttaaagga ttttgccttt tctttgaagc 1020 atttttaaac cataatatgt tgtaaggaaa attgaaggga atattttac 1069

```
<210> 5183
<211> 1805
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1806)...(778)
<223> similar to gi32391 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5183
ttttagggcc agcgtctggg ctccatttga tcaggtcagc atttattagt aggaagcagt
                                                                       60
aacatttaca actggtcctc gggcaggaac cgggagggcc accacccgcg gccgcccacg
                                                                      120
cgagcccagc cttcaggagg agagagcagc gcgtccaatg cactgaggac aataccccaa
                                                                      180
cccgcctcga ggctcctgcg gctcctctaa gcctcactgg atgatctcca ccagaggtcc
                                                                      240
tegegtgeet eeetgaggaa agggggettt egeaactggt gggeaaceee geegggette
                                                                      300
acceptagget agcagecegt gtgteegeac tettgteget etgeetteat tettagaatt
                                                                      360
ggggcgcact tggacccctg tttgggcagt gctggggggt gagggggact aaactaacag
                                                                      420
cacttttcaa aaacatgggg gacatttaca caagagaggg ctccccaagc cagcttgcac
                                                                      480
tcacaaaata tagcatttct taaggaacca atggagcagg aaaaagaggg agtgggatag
                                                                      540
ggcgaaaccc caaagccact tggtttttcc aacacgtaaa cgagcaaata cagagtcccc
                                                                      600
caaatacctc agagaccaac cccccagtcc cttttattta aaaagaaaaa aaaaaagaag
                                                                      660
aagaagtcca agtcgctgga gagtttctgg aaatcaagca ccaaacaccc acaaaggaaa
                                                                      720
acagcaacaa caacaaatee getgeeettg agegeteeeg ceagcaeege geegggteag
                                                                      780
teteetttgg ggeatttete ettgeteate ttttteattt teateetaeg gttetgaaae
                                                                      840
cagattttga cctgtctctc tgttaggttg agaatcctgg ccacctcgta gcgccggtcc
                                                                      900
cgggtgaggt acatgttgaa gaggaattet ttetecaget caagegtetg gtatttggtg
                                                                      960
tagggacage gettitteeg ggtggagega gegtggatee agitegegge ggggttgttt
                                                                     1020
gggtcaagtt gctgctgctg cggctgcgaa tgctgcttct cctcctcctt caqcqaacaq
                                                                     1080
cetgggateg ggtggteget geaagetgag ggeteegaeg ageegeeegt eeeagtegeg
                                                                     1140
gccccgatcc etgccccagg cccggttccc cccgtcgccg etgccgcctt ctcctgcagg
                                                                     1200
aacgagttgc acgagaactc ggggccgctg ctcccctggg actcccgggc cacgqagcac
                                                                     1260
teagteegtt tggaggagga ggataaggaa gtggaggagg aggaggtggt ggaggeggee
gtggcggggg ccggggccgc tcgggtttca ggcttaatcc cgtagtggcg cccgttggct
                                                                     1380
gggccgctgg ggccagggct gggaccgcgg cccggaccgc cgcctccacc accaccqcca
                                                                     1440
cegecegeae egecegggaa geegggeage ggetecatee aggagegeae gtageggeeg
                                                                     1500
ggctcggagg cagaggcggc cagggggcggc gggggaacgt acgggtggta gaggccgctc
                                                                     1560
ategeegeeg etgeeggggg etggggaggge acegeggace acgaggeaga gaacaeggee
                                                                     1620
gatctggggg caaaactaca cgaggcgaac tcggcggcgg tggcggccgg gccatcagcc
                                                                     1680
acacetgeag geoggeeetg egegeetgge eeeggeggee egaagegege egegaacace
                                                                     1740
tegtegeeet catggeetat aagegagtee aegtagtagt tgetgagggt gecaetggaa
                                                                     1800
gacat
                                                                     1805
```

```
<210> 5184
<211> 774
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (4)...(379)
<223> similar to gi3387798 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
60
geggaggact ttgeggetgt gegggeegat gacteagagg tggatgggga etgeageetg
                                                                      120
actggacctt ctgctttggt gggctcctat ggcacctccc cagagggggt cggaggatac
atccattccc atcggcccct gggcccaaga gagtttgagt ccttcattga tgtctatgcc
                                                                      180
                                                                      240
atcoggagtg ctgaaggagc cccccagaag gaggtctact tcatgggcct cattgatatc
                                                                      300
cttacacagt atgatgccaa gaagaaagca gctcatgcag ccaaaactgt caagcatggg
                                                                      360
gctggggcag agatctctac tgtccatccg gagcagtatg ctaagcgatt cctggatttt
                                                                      420
attaccaaca tetttgeeta agagaetgee tggttetete tgatgtteaa ggtggtgggg
                                                                      480
ttctgagaca cttgggggaa ttgtggggat attctagcca ccagttctct tcttcctttg
ctaaattcag gctgcaggct ccttccatcc agataactcc atcctgtcga gtaggctctt
                                                                      540
                                                                      600
tetgaceete agaaatacat tgteettttt cetetttgee catttttett ceetetette
ctccccatga gaagtctgct tgtagtatta gaatgttatt gttgactctc tcccaagtgc
                                                                      660
                                                                      720
cttgatcttt gtaatatctc ctgttgtttc tatgatatag gagctagggg aagggggttg
                                                                      774
cttgccttct tcaggacctg actggacaga tggacctggc tcaagcaact actc
```

```
<210> 5185
<211> 1582
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(742)
<223> similar to gi498015 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5185
gtggtgtegt acatgacaca atgacgtgtt tegggecata teetattgga actggactte
                                                                       60
                                                                     <sub>.</sub> 120
agggaataac cttgtgttat agttgttttc cctccttctg caagatgaaa agcaggatgt
gcatggctat cagcatttgt cagacgcttt ccatgttgag ttttgtggtc tgtgctttca
                                                                      180
                                                                      240
ggtacaggca tatgttcaaa aggggttggc caatgggtac atgttgtttg tttctgccca
cagetgeece agtgeteage tgtgaagetg caacacagae tgaaaggaga etggatetgg
                                                                      300
ctgcagtgac tctgaggaga ggcttgagat ctagagcttc gcgatgcaga ccgcggtctt
                                                                      360
tgatagatta caaatcctac atggacacca agctgctggt ggcgaggttc ctggagcagt
                                                                      420
cctcttgtac catgacccca gacatccatg aacttgtaga aaacattaaa tctgttttga
                                                                      480
aatctgatga ggagcacatg gaggaagcca tcacaagtgc cagttttcta gaacagataa
                                                                      540
tggccccatt gcagcccagc acatccaggg cccacaagct gccctcgcgg agacagcctg
                                                                      600
geetgetgea cetecagage tgeggegace tteacacett cacaceageg gggaggeece
                                                                      660
gagecgagag gaggeceegg egagtggagg etgageggee acacageete attggggtea
                                                                      720
tecgagagae tgteetgtga accetggaag acagaaggee actecaaggg gaaggateee
                                                                      780
tetectetet gecatttett ggetgggage tgtggteeac etcaaaaaa aggageacte
                                                                      840
tggaggacac gttttcccac ctgttggctc ccgtgtctgc tgactgaggg cattcaggag
                                                                      900
taaatgcaca ggtcggtcca ggcccgtctg ggtttgggat gcactgagtt ggaggttatg
                                                                      960
aaagetttga teetettett eetetgetgg geetegeage atteeeaagg gteacatgee
                                                                     1020
ctggcatggg cagaaactgg gctaatgatt ctttgcccac ttcacccctc gtgtctctct
                                                                     1080
ttgttgctaa gttctttccc tcttggaagg acagatctgc cgggctgcta tttatagttg
                                                                     1140
cctttggcct ttcactgctc tgcgatttgg caggaaataa ggcgattaac cctatgtgtc
                                                                     1200
cacaagcete aagcettgtt teaggteace etcaaateae aetetetta ggeaaaacag
                                                                     1260
gaaacttett aagtgacaaa ttttaatgee agacatttaa ggagaggatt attgttgatt
                                                                     1320
ccatttactc atgettgeaa aactagagac cectaaggea gaactgagaa taaacatgtt
                                                                     1380
tactttgggc cactgggctt gatgtgtaat atttgttatt acatgtatcc ttcgggctgt
                                                                     1440
```

```
ategiteatt cagcaageae ttiggetggat ggetteatgg agetgeette teatgggate 1500 geggacaata aateaataaa gtaattacag attggggatt attgetaaaa agagcaatag 1560 gtggttagag ggaatteeae ca 1582
```

```
<210> 5186
<211> 1949
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1940)...(348)
<223> similar to gi4314433 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5186
                                                                     60
ttttttttt cgttgaaaac caataattta tcaaaacgct gcgtgtgtat gggggggga
                                                                    120
ggggtgtccc aacaaacagg gcagcggggg gcggacccac aggcaggaaa cggtgcccgg
aaaggggggg cggcagcctt gccactggct aggccatcgc gggcgggcag gctagacatt
                                                                    180
                                                                    240
cttgccgcgc aggcgcagtt cgtggcgtcg caggtggttg tagagcgact gcacataggt
gaagacacac ttggggtcag gcttcttgcc catgatcatc atgtcgtcca cctccaccag
                                                                    300
                                                                    360
gggcacacag tecaccagca teegtgggge eeegagcagg ggttaggact ttttggtttt
                                                                    420
taccagecce ttetggacca gacageggta gaatteetgg atgtacgtgt acaegcaett
ccagtcaggc tetegaagee geaceatgte etetgtatee aggagetgeg ggeagteege
                                                                    480
                                                                    540
atgggtetee geagatgaga aggecacete gaagttetgg egteggttet gagggetaag
                                                                    600
ctgcccatag tcgaaggcct cagggaagaa gttgtgcacc agggcacaga aggccatccc
                                                                    660
atcactccag ctggaggaga agttctggat gtcgacgtgc tcgtagccgc gagtcttggc
                                                                    720
tegacaceag tecageagea tetgettgat getgttggeg ttggggacee egaagetggt
                                                                    780
ggategetge aeggetgege ggggteegee agggetgeeg geegegeest cetteteeag
                                                                    840
cttctcaatc atggccttgc gcgcctggga ggctgaggtc ttgggcagac tctgcgcctt
                                                                    900
catcagetet ttettettet eggeetgeeg tttetegage geegeeagge tgeeggeeeg
                                                                    960
tgggctggcc tggtcctcgc ggtcgaagat gctgcccatc ttcttggatg aggaggaaga
                                                                   1020
ggagaaggtc ttggtttgca tcatggtgct gccactgcca ttctccgagc gcctcacgaa
                                                                   1080
actegactee actgtggtgg tgegggeegt eegtgtgeea teattggagt ggaegageeg
ctcagtcttg gtaacagtgc tgacagcaga gccatcagct gcccgctggc tgtgcctcgt
                                                                   1140
ggtggtctca gtggctgtgt tgccgcgccc ctcccctggc cggccccgtg cctcctgcag
                                                                   1200
ccgccgttcc cgctccttgt cccgctggtc tctcttcctt tgtcggagct cacgaagtgc
                                                                   1260
                                                                   1320
ageceggatg agetteeget etteaaagte egtgetetga teeageatet tgteeaagae
tectteatee teaatagtea teageteete agegeteaga gggeteegee ettetggtge
                                                                   1380
                                                                   1440
tttgtteact egggtetget eageeceatt ggeeacttee actgetgeag egagaggete
                                                                   1500
tgctggctct gcttccatct tgatgctgca gcctcctcgg ctactggggg gggcatggct
gaagetggtg acatgagtga cactgeecag eegagecagg gteecaggge tgttgacaeg
                                                                   1560
                                                                   1620
ggtgatggtg ctcttgcccc cactactggt gctgagtagg gtcgggggcg cccgcagccc
                                                                   1680
cagtgtcagt tetgecetet ggttgeetgt gggcagcage acceggeetg tggaggeetg
gecaeggeeg teettgatet egatggtgaa tgtggtette atactgeece etggetegge
                                                                   1740
                                                                   1800
agtgeegaeg geeaegggea geggggeaec aggeteetet gaaegtgeea caggeeeece
                                                                   1860
geagettega agetgggeea ggggetggge tacteetegt tgeteettge tgaaceggga
                                                                   1920
                                                                   1949
ggaggtatca ctgggcgaat tccaccacc
```

```
<210> 5187
<211> 1091°
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1080)...(844)
<223> similar to gi3342738 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5187
atccgtccgc tgaatttttt ggaaaaacgg aaaaaaccaa gtgcctttag gaaaaaaaaa
                                                                   60
ggetggggeg ggtggeteee eeetgtgatt eeegeeettt gggaggeeea ggaaggagga
                                                                  120
180
tctgtagaaa aatggaagag attggggagg gaggaaagag gctgcctggg tccaggttgt
                                                                  240
                                                                  300
geetetgtgt gaagagaeae eageggetge eagtggggag tgeggagtaa aggeetgegg
gaggagatgt cegeteteag gggeteggaa geceeteage etettgeete eecaacggga
                                                                  360
                                                                  420
gacatgtagg aggccgagca agctgggtgc ccttgagaga caggcccagg cagggctgtg
gccacagcag ccctgggggc tccccagcga ggtggaggca gaagttccag gagcctggga
                                                                  480
gccacccagg gcaaggagtg accctggaag ccatccagcc tcctggaaag tggaagtggt
                                                                  540
ttaaaaacac agtgggcttt tccggttgct agtaacacat agaattacag agttcacgtt
                                                                  600
ttagtcccag acgggagact gaggctcgag actgaggaag gcatctgccg tccggggttg
                                                                  660
gageteetga ggaccaacae etgeteageg geteggeece tggteteeet gagatgetea
                                                                  720
ggccggagag aagcgggatg atggttccag agcgtcctcc tccaagtctc cgaggcccca
                                                                  780
geggeggtte gggeaceggg agaecegegg ggeteteagt ggeacateeg ggeggteatt
                                                                  840
                                                                  900
tettteagtg getecagete ettggtgteg atgaggeega acteettgae gaaatagtag
aagtgettgt ageaggtgtt caegtgggee teggageeea tetgeeegat geggteaaag
                                                                  960
tggtggatgt agacgtgcac gaacacgcgg aacagccgca acaggatett ccgcaccgtc
                                                                 1020
tgcaggaagt tcttgggaaa cggagtgcca acgttggtgg ggaagaggtc ctcgttgttg
                                                                 1080
aagtcccgcc a
                                                                 1091
```

```
<210> 5188
<211> 2014
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (18)...(1417)
<223> similar to gi56494 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5188
togacccacg cgtccggatt tatgaagctg atttgcagta ccgtgtcacc ctagattcac
                                                                     60
taagacaaat atcacgaagt tttttctctg gaactcaaga gagaaaggtt caaaggaaca
                                                                    120
tcacagttcg aaaatcagaa tgcactaagc actccttcta catgttggac aagcatgact
                                                                    180
ttcaggactc tgtgagaata acgttggact ttaatcttac cgatccagaa aatgggcctg
                                                                    240
ttcttgatga ttctctacca aactcagtac atgaatatat tccctttgcc aaagattgtg
                                                                    300
gaaataagga aaaatgtatc tcagacctca gcctgcatgt cgccaccact gaaaaggacc
                                                                    360
tgctgattgt ccgatcccag aatgataagt tcaacgttag cctcacagtc aaaaatacaa
                                                                    420
aggacagtgc ctataacacc aggacaatag tgcattattc tccaaatcta gttttttcag
                                                                    480
gaattgaggc tatccaaaaa gacagttgtg aatctaatca taatatcaca tgtaaagttg
                                                                    540
gatatecett eetgagaaga ggagagatgg taacttteaa aatattgttt eagtttaaca
                                                                    600
catcctatct catggaaaat gtgaccattt atttaagtgc aacaagtgac agcgaagaac
                                                                    660
ctcctgaaac cctttctgat aatgtagtaa acatttctat cccggtaaaa tatgaagttg
                                                                    720
gactacagtt ttacagctct gcaagtgaat accacatttc aattgctqcc aatgagacag
                                                                    780
tecetgaagt tattaattet aetgaggaca ttggaaatga aattaatate ttetaettga
                                                                    840
ttagaaaaag tggatctttt ccaatgccag agcttaagct gtcaatttca ttccccaata
                                                                    900
tgacatcaaa tggttaccct gtgctgtacc caactggatt gtcatcttct gagaatgcaa
                                                                    960
actgcagacc ccatatettt gaggateett teagtateaa etetggaaag aaaatgaeta
                                                                   1020
catcaactga ccatctcaaa cgaggcacaa ttctggactg caatacatgt aaatttgcta
                                                                   1080
ccatcacatg taatctcact tettetgaca teagecaagt caatgttteg ettatettgt
                                                                   1140
ggaaaccaac ttttataaaa tcatattttt ccagettaaa tettaetata aggggaggae
                                                                   1200
ttcggagtga aaatgcatct ctggttttaa gtagcagcaa tcaaaaaaga gagcttgcta
                                                                   1260
ttcaaatate caaagatggg ctacegggca gagtgecatt atgggteate etgetgagtg
                                                                   1320
ettttgeegg attgttgetg ttaatgetge teattttage actgtggaag attggattet
                                                                   1380
tcaaaagacc actgaaaaag aaaatggaga aatgaaatat tttacgaaag aaaataataa
                                                                   1440
caattattca ataatctatc ctcaggtttg cctcaaatat gtgacaagaa atgtataatt
                                                                   1500
catgacatag tcatgtaact atgtaatcca tcagggattc attacttqqa aaatqacaqq
                                                                   1560
gcatgcatta tccaaaaaca ataccaaaaa gacatatttt ataaaatgac aaaaaatatt
                                                                   1620
ttacataatt actcattitt gitgagtaag caaaattaca aagtgittitt aaaaaaacct
                                                                   1680
gtacaaatat gtttatgtat taaatcacca tccaaaatat ttaaggaata tataaaaaga.
                                                                   1740
tttttatgat catagaaaca tctattttca aaacaatata aattaagctt ttccccttga
                                                                   1800
1860
ttacctgaaa aagatcattt ctccctattc aaatgagaat attttccctc ggtagaatcc
                                                                   1920
atatacaata tggattgaaa attaagtcac gaagaataca tttagcatct ttgtgttggg
                                                                   1980
ttctatacct aaaaattttc cctcccggcc caag
                                                                   2014
```

```
<210> 5189
<211> 1291
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (947)...(502)
<223> similar to gi5020266 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5189
ttttttttt ttcccagttt caggtatgtc tttattagca gtgtgaaaat gaactaatac 60
agactggaag ccttgtgaca ggaaaactga acatctgaga catctatagg aaaaaaagat 120
```

```
ctgcttacat ccagtccttg gagttccagt agactgattt attcaccaac agcattgctc
                                                                       180
ctccagctcc attccaggag acaggcaccc cagaagtagc aggactggta gacatcacta
                                                                       240
                                                                       300
gtattgtata tgtgttgggc catgtttgtg tgttgaggaa gaggatgggg aaaacaatga
tggtggtcac caggtaagat ggggacccag gaagggattg caagtccagg ccccatgaac
                                                                       360
acccccaaag aatgcccctc ctcttggaaa taaaagtggg tcttggatcc agggagatca
                                                                       420
acagttgcaa ggctgatatt aagagttgtc tattggatct gttctaaggg atatgttatg
                                                                       480
tgaagccaaa ttaatgaagt taggaagtca cattacaagt tgatgggtac tttgtttcat
                                                                       540
                                                                       600
caacttgtag aatttettee ttttgaacet etttaetggg tgttagetgg tgaettaggg
gtagggatgt ggaggctgtc ataggcccgt ctccgctctt gggcctgaag ggaatcctat
                                                                       660
gtatgcggca gtatacaaag tatgcaggga tggggaggat gacaatggca aaaagggtga
                                                                       720
tcatcaagag cagtgcccac ggtgggtatg gtcgaagcac ctcttttgag gtgcttgagt
                                                                       780
cccaggacat gtaggtgatc ggcttcatac aaagatgaac catcatggtc acaaagatga
                                                                       840
                                                                       900
ttagcagcac aactggacac agatggggcc acagccaacc aaagatggga gagatggggt.
                                                                       960
ggcccaacag gatcgtcagg tctgcaagga acctggagaa gggccaccag agtgtgggat
                                                                     1020
gcccagttag gcctcaccac cttggaggca gggccagccc aaccttggca tctttcaaac
attetattgt atetetaate teetgtttea teteaagtet tgteetetet catetteece
                                                                     1080
ctagtcagtc tgtcttctat cctaacccaa gaaacttttc caaacacccc tctcctgctc
                                                                     1140
aagaacttte catgggtate caatggeete aggagaaagg ceaagtetet tteatteate
                                                                     1200
ccataaatat gagaatgtet atgatgtgcc aggaactett ttaagtgctg gatatecage
                                                                     1260
agtgaacaac acagataaaa taaagtggca t 🕆
                                                                      1291
```

```
<210> 5190
<211> 1736
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(1009)

<223> similar to gi5834569 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5190
gtgcgaggaa ttcggcgatc aaggtatttg tggaatcgat gaatttgata agatggggaa
                                                                       60
tcaacatcaa gccttgttgg aagccatgga gcagcaaagt attagtcttg ctaaggctgg
                                                                      120
tgtggtttgt agccttcctg caagaacttc cattattgct gctgcaaatc cagttggagg
                                                                      180
acattacaat aaagccaaaa cagtttctga gaatttaaaa atggggagtg cactactatc
                                                                      240
cagatttgat ttggtcttta tcctgttaga tactccaaat gagcatcatg atcacttact
                                                                      300
ctctgaacat gtgattgcaa taagagctgg aaagcagaga accattagca gtgccacagt
                                                                      360
agctcgtatg aatagtcaag attcaaatac ttccgtactt gaagtagttt ctgagaagcc
                                                                      420
attatcagaa agactaaagg tggttcctgg agaaacaata gatcccattc cccaccagct
                                                                      480
attgagaaag tacattggct atgctcggca gtatgtgtac ccaaggctat ccacagaagc
                                                                      540
tgctcgagtt cttcaagatt tttaccttga gctccggaaa cagagccaga ggttaaatag
                                                                      600
ctcaccaatc actaccaggc agctggaatc tttgattcgt ctgacagagg cacgagcaag
                                                                      660
gttggaattg agagaggaag caaccaaaga agacgctgag gatatagtgg aaattatgaa
                                                                      720
atatagcatg ctaggaactt actctgatga atttgggaac ctagattttg agcgatccca
                                                                      780
gcatggttct ggaatgagca acaggtcaac agcgaaaaga tttatttctg ctctcaacaa
                                                                      840
cgttgctgaa agaacttata ataatatatt tcaatttcat caacttcggc agattgccaa
                                                                      900
agaactaaac attcaggttg ctgattttga aaattttatt ggatcactaa atgaccaggg
                                                                      960
ttacctcttg aaaaaaggcc caaaagttta ccagcttcaa actatgtaaa aggacttcac
                                                                     1020
```

```
caagttaggg cctcctgggt ttattgcaga ttaaagccat ctcagtgaag atatgcgtgc
                                                          1080
1140
acacagteaa atactgttet etgaaaaatg atgteecaaa agtattataa taggaaaaaa
                                                          1200
gcattatata taatacacta atttaagaag tgataaagtc tccagatgca gtagctcaca
                                                          1260
ctgtaatcac agtgactcag gaggctgagg tgagaggatt ccttgaggcc agggttcgag
                                                          1320
accaaccttg ggcaacatgg caagacccca tttcttaaat tagtttatta tatttaatgc
                                                          1380
ttttttccta ttataatact tttgggacat catttttcag agaacagtat ttgactgtgt
                                                          1440
1500
cactgagatg gctttaatct gcaataaacc caggaggccc taacttggtg aagtcctttt
                                                          1560
acatagtttg aagctggtaa acttttgggc cttttttcaa cgaggtaacc ctggtcattt
                                                          1620
agtgatccaa taaaattttc aaaatcagca acctgaatgt ttagttcttt ggcaatctgc
                                                          1680
cgaagttgat gaaattgaaa tatattatta taagttcttt cagcaacgtt ggtcga
                                                          1736
```

```
<210> 5191
<211> 2291
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1985)
<223> similar to gi3329465 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
`<400> 5191
gagatacccg tgtaggcctt tttgcactaa gtgacattaa agtaggcact gaacttacct
                                                                       60
tcaactacaa cctagaatgt cttgggaatg gaaagactgt ttgcaaatgt ggagcccga
                                                                      120
actgcagtgg cttcttgggt gtaaggccaa agaatcaacc cattgccacg gaagaaaagt
                                                                      180
caaagaaatt caagaagaag caacagggaa agcgcaggac ccagggtgaa atcacaaagg
                                                                      240
agcgagaaga tgagtgtttt agttgtgggg atgctggcca gctcgtctcc tgcaagaaac
                                                                      300
caggetgeec aaaagtttac caegeagact gteteaatet gaecaagega ceageatgga
                                                                      360
aatgggaatg teegtggeat eagtgtgaea tetgegggaa ggaageagee teettetgtg
                                                                      420
agatgtgccc cagctccttt tgtaagcagc atcgagaagg gatgcttttc atttccaaac
                                                                      480
tggatgggcg tetgtettgt actgageatg acceetgtgg geecaateet etggaacetg
                                                                      540
gggagatecg tgagtatgtg cetececeag tacegetgee tecagggeea ageacteace
                                                                      600
tggcagagca atcaacagga atggctgctc aggcacccaa aatgtcagat aaacctcctg
                                                                      660
ctgacaccaa ccagatgctg tcgctctcca aaaaagctct ggcagggact tgtcagaggc
                                                                      720
cactgctacc tgaaagacct cttgagagaa ctgactccag gccccagcct ttagataagg
                                                                      780
tcagagacct cgctgggtca gggaccaaat cccaatcctt ggtttccagc cagaggccac
                                                                      840
tggacaggcc accagcagtg gcaggaccaa gaccccagct aagcgacaaa ccctctccag
                                                                      900
tgaccagece aageteetea eeeteagtea ggteeeaace aetggaaaga eetetgggga
                                                                      960
cggctgaccc aaggctggat aaatccatag gtgctgccag cccaaggccc cagtcactgg
                                                                     1020
agaaaacctc agttcccact ggcctgagac ttccgccgcc agacagactg ctcattacta
                                                                     1080
gcagtcccaa accccagact tcagacaggc ctactgacaa accccatgcc tctttgtccc
                                                                     1140
agagactece acetectgag aaagtactat cagetgtggt ceagaceett gtagetaaag
                                                                     1200
aaaaagcact gaggcctgtg gaccagaata ctcagtcaaa aaatagagct gctttggtga
                                                                     1260
tggatctcat agacctaact cctcgccaga aggagcgggc agcttcacct catcaggtca
                                                                     1320
caccacagge tgatgagaag atgccagtgt tggagtcaag ttcatggcct gccagcaaag
                                                                     1380
gtetggggea tatgeegaga getgttgaga aaggetgtgt gteagateet etteagaeat
                                                                     1440
ctgggaaagc agcagcccct tcagaggacc cctggcaagc tgttaaatca ctcacccagg
                                                                     1500
```

```
1560
ccagacttct ttctcagcct cctgccaagg cctttttata tgagccaaca actcatgcct
caggaagage ttetgeaggg getgageaga ceceagggee tettageeaa teeeegggee
                                                                     1620
tggtgaagca ggcgaagcag atggtcggag gccagcaact acctgcactt gccgccaaga
                                                                     1680
                                                                     1740
gtgggcaatc ttttaggtct ctcgggaagg ccccagcctc cctccccact gaagaaaaga
                                                                     1800
agttggtaac cacagagcaa agtccctggg ccctgggaaa agcctcatca cgggcagggc
                                                                     1860
tetggeceat agtggetgga cagacactgg cacagtettg etggtetget gggageacac
agacattggc acagacttgc tggtctcttg gaagagggca agaccccaaa ccagagcaaa
                                                                     1920
atacacttcc agetettaac caggeteett ccagteacaa gtgtgcagaa tcagaacaga
                                                                     1980
agtagtacca atcaatgtca catgaacaaa caagctgccc ccagggtacc atttggggag
                                                                     2040
gggaaatett ttetttettt ceeettaaa aaaaaacaca tetgeeeega acaettteee
                                                                     2100
                                                                     2160
actgttattc tttcctcata tcccaacact cagaactctt gtgacattag ccagtggggg
                                                                     2220
cttatggttg tgtgaaccat gtatgaaaat ccagtgggcc ccaaccaagg agacagacag
                                                                     2280
acttgggtet ettteececa actttteeae atggteateg tgaaataaaa agteecetet
ggaaaaaaaa a
                                                                     2291
```

```
<210> 5192
<211> 857
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (860)...(219)
<223> similar to gi455834 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5192
ttttttttt ttctggacat cttccatttt atagaaaggg aaattgaggc caggggttgg
                                                                       60
ggaggcctgg caaggaacat ggtgcatggt aggtggcaga agggacctct gtgctcagag
                                                                      120
ctgtgcctca ggacccatcg ttcagatggg aagactgagg ttggggaggt gtgtcttggg
                                                                      180
ttaggaaget gggetegggg caggggteag egegggeatg geaggeaegg tgaatgtgaa
                                                                      240
etteteagte tggacaaagg caacgeeett etcatagtag geageetegt taatgaacae
                                                                      300
ggggtacace gtggaetete ceteatagag caggteetee ecaetgaaca tetggaagat
                                                                      360
gggagcacca ggctgcagtg gctggaagtc tcggtcctgc agctgaggat gcacagtgcc
                                                                      420
tgccaggtgc ccggcctcgg tgcgggggaa gtccacgacg cccacgggtc tataggcttc
                                                                      480
catctcaaag gcaggaaagg ccgtaccctg gttgaagagt tcgatgaagt ccagaactgt
                                                                      540
ggccaccagg gtcctcatcc ttgagaaaat gtcagcccgc agcacaccct gtggctgggg
                                                                      600
gcccagetee agaeeeagte catttttgge cacagagtee aggttgtage teteeteeee
                                                                      660
agaccgctgg tacaggaaga cctggcagga cagctcgggg tactgcagct gcagatggcg
                                                                      720
gcacaggtgc atggcaaaga cttcgtggga ggacttcgcg attaagcagg tgcccatgtt
                                                                      780
ggccgtggtg ttgtgcaggt caaggacaaa gtcaaaggcc tggcccgagg ccttgggccc
                                                                      840
cagcagctgg ttcagct
                                                                      857
```

```
<210> 5193
<211> 1598
<212> DNA
```

```
<220>
<221> misc_feature
<222> (1079)...(831)
<223> similar to gi2276319 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5193
togaccoacg cgtccgcca cgcgtccgaa aaaaaaaaat gttgatcctg tcttggtccc
                                                                       60
cctgggatcc gtctttctg acgtttgccg ctgtctcccc tcatccccca ggttgctagt.
                                                                      120
taattetete ceetegigee igeaecetge igeectaget ageetggeea ecteaetgee
                                                                      180
gtgtcctgca tcaggccagc cacagagtcc tacaggtccg gggcttgctt gtgggaacgg
                                                                      240
                                                                      300
cttgttette tagaetetgg gggegggge ttgggtgtgt tteettaett gtaaaaggte
                                                                      360
ctgttgtttt tgggagcagg gagtaatggc ggatgagacg ctgtgtggag gcggcagctc
ctggtatggg gtaacgccct gtcccctcat tggcaggtgg tttgcatgaa gcatcaggcc
                                                                      420
agagggtgtg agtgccaagc cctcacccca catgctgctc ctgttaaaag caaactccac
                                                                      480
tgacccccc gggaagtcag gatttgggat ttacttcctg gaatgcttgc ctctggctgc
                                                                      540
toggaattog ggcctttccc caaagcctga accaggcctc acagtggcca tcaggcacag
                                                                      600
aatggatggg cacagetgag tggetecaet ggetttaate tgeeceaect ettecaeaec
                                                                      660
                                                                      720
aacctccacc ctctggttcc gatgtgcttg gttacaaagc acctgattat ttaagagaac
                                                                      780
gaaaaaccac caccagttcc tgtaaagaat aagtcacagg tgcacaggtg aagggctgag
                                                                      840
ttgtggtcca gccccaggga gtgtgggctg tgaggcagga gcgagctaaa cctgtaggag
cagegocaeg getgecagga tecaettege tgeettetet ttggtettea agttaaaggt
                                                                      900
                                                                      960
ccagacatag gtggggccgc ggatgcgtgt tttgtacacg ggacactcat agatgttctt
ggtctccatg cggtccacag gaatggcctt gatgaagatg acaggcatgg ccggggtcag
                                                                     1020
etettteage egegetteag egatgaetee agtetgggtg teccagegag eecetgeagg
                                                                     1080
                                                                     1140
gacagtatgg ctgagggtca ggtgtgctgc cagtaagtga gggaggggct ggcaggaagg
                                                                     1200
gtggggteet caeaeteece geeetetgea gagetggget etaceecaaa aggetteagg
ccagctgcca cagctggaag cagaggcctt cgtaggtgat ggcctgcatg ttgtaactac
                                                                     1260
cccgtcccgc tgggctcaag gaacagctca gctaaagccc tcgggttcca tccgtttaaa
                                                                     -1320
totgtggcat tttcagagoo toatotgtca goottaatgt cagtggcagg aagtcataac
                                                                     1380
tocagotaaa aattacagag taaagttooc tgattottaa tgtgtaatgt otgooctatg
                                                                     1440
tgtacataca caatataatt atacatctgt gcatataaat attgccttta accagactgc
                                                                     1500
tattatttct actogoccta tttaatggtg tttttatttc ctgtctgaaa tctcaaaata
                                                                     1560
                                                                     1598
aacaaacatg gagagcttaa aaaaagtcga cgcggccg
```

```
<210> 5194
<211> 990
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (990)...(861)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5194
                                                                       60
tcagatgaca gtaaacctca gagttgttat aaattaaatg gatataatgt gtgtaaagca
cttagcataa tgctttatac atcgtagaac tttcaaaaaat aggagtagta attattacaa
                                                                      120
aqaaatgtga agaagagtcc tagtgggctg catgttaaaa atagttttta gttaatgaaa
                                                                      180
                                                                      240
attaaatcac atcttagatg tttatcatct gcatggtact tttctggttg ctgctttaac
ctttgtatag ttgaaaggct gtaaactttc tagtattctt tgatttctgg cccatttccc
                                                                      300
                                                                      360
tcctaccatt cacgettata ttttttggtt caagtcacca ttccttgcaa aactaattaa
atacattcct aaatacataa tattgccaat attcattcac atccaccacg tctagatcca
                                                                      420
                                                                      480
agtetteate ttetttatge tggtetaatt tttgetgage ettagaagea aagacagaet
                                                                      540
ccgggggttg atatgggacc tccagaatgg ggattgcaca gaataatctt atttttcctc
tattetteta ggetgttatg ttetgaacce acacatgttt teggaaggae cagatggetg
                                                                      600
                                                                      660
acactggcta atgggaacca aaagacgagt gaaagtaacc tgggttgtca cataccccca
                                                                      720
gettagaggt getteaccet geeceaaggt caatttettt tttetetaga gaetttaece
                                                                      780
cattatatca aaaaccttta ctacagcctg actttatctg atgttagagt atcattaagt
                                                                      840
caagcagcag catttattga gtgaaaaaag attgtacaca ggactggaag agaagcatct
                                                                      900
gcctttaaaa tacagtagaa ggccgggcat ggtggctcat gcctgtaatt ctagcacttt
                                                                      960
gggaggccaa ggcaggtgga ttgcctgagc tcaggagttc gagaccaccc tgggcaacat
                                                                      990
ggtgaaaccc tgtctctcct aaaaaaaaa
```

```
<210> 5195
<211> 916
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (600)...(398)
<223> similar to gi4468339 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5195
ctgtggcgga attcgaacgc gggagaagga cgttgcagtg agccgagaac gcaccactgc
                                                                       60
actccagcct gggcgacaaa tgacactcca tctcaaaaca taaaaatata aaaaatgttt
                                                                      120
                                                                      180
ggetttggaa accatgeeet getgettaac etactgegte etggggeagg tteettgtea
tetetaaget geagttttet eatettegaa atagttetaa geeceetat ggetettttg
                                                                      240
ggtttcagag tttgtaatat agcgccttta ttctccacac agagcaggca ctcacaactc
                                                                      300
                                                                      360
tectttteca etgteetete tteeetggte tetgatetet egageeatee taatteetgg
acceptigea gigietige cagetigget tecceageae igiectecae cicetiggeea
                                                                      420
cagecetatg cacetgeage ggggeeeact gggeaggtge tggeaetgge etceatggte
                                                                      480
acagtagece etactgeacg gggacacgea ggtgaageeg etetggggge tgtagaceag .
                                                                      540
gtegtagece tigtagecat egeatetgaa gtaageette agegtgetea egiteaetgi
                                                                      600
cgggaaggac acagattaac acagaaagca accgatgaac actaaatcag taccttttca
                                                                      660
gccacgaatt ccttttcggg tgtttatcct gagaaataat tggagaagtg cacagataca
                                                                      720
tatgcccctg gacgttcaga tcagcgtggt ggataatagt aacgtttcag aagtagggtc
                                                                      780
tggttaaata aactactgca catcettace aagggatggt getteetagg gaaaaagttt
                                                                      840
                                                                      900
cctagggaaa aaggttcctg tggaaaaagg ttcctatgga aaatgctttc ctgaagagca
catgctttga aggtgg
                                                                      916
```

```
<210> 5196
<211> 1404
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (18)...(438)
<223> similar to gi5777952 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5196 eggetteeat gatggetgag gaaaegegea atceeetgag gaacaaagae tteeaggagg 60 tgacactgga gaaggaggc caggtgctgc tgcacttcgc aatggcgtac ggcttccgca 120 180 acatecagaa cetggtgeag aggeteaaae gagggegetg eccetaceae taegtggagg teatggeetg ceceteagge tgeetgaaeg gegggggeea geteeaggee ceagaeagge 240 300 ccagcagaga gctcctccag cacgtggaga gactgtacgg catggtccgg gctgaggcgc ccgaggacgc gcctggggtt caggagctgt acacacactg gctgcagggc acggactcgg 360 agtgtgcagg tegettgetg cataegeagt accaegeegt ggagaaggee ageaetggee 420 tgggcatccg gtggtagggg ctgcaggacc aggactccca ggaggccgtg tccatgtgtg 480 540 acagcagaac cacatgeece aagaeeecag ggeteeeee aaaattetga gtgagetgea gggtgtgctg ggacccgagt aggagctagg actagccagg acccgcagcc gcctcgtcac 600 etccagttgg gtgeetetgg gtteecaetg getetgeeca ggtggggtgg ggtggeecag 660 gcagcagaag gttccctgag gtcccagagc ctgttccgtt ggccctgggc cgaggcccac 720 aggtgetgee ettgetgetg etggteggge acceaagtge gtgagggget teageetgte 780 ccggggttgc ctgaggcaga gcaagacggg ttctcacccc tgacttctgg aggcttccct 840 tgaagctctg tgcaaaaggt gggagacaga gctggacctg caggggtggt cccgccacaa 900 ccctgcgtgt ggaccctggc agggggggt gccaggcccc tggaaagcag gggttaccgt 960 tacgaggetg tggteegggg caagecaagt aegaageage agecategeg ggetgeatea 1020 tececcagee aggteeccae caggeetgte teceagegtt tgtetaataa aegeaeceet 1080 cctaaaacac gcaaaaaaa aaaaaagggg gggccgtttt aaagaaccct tggggggccc 1140 aaattttacc cgggcttgca aggtaaaatt tttttcctta tggggggcct ttttaaaacc 1200 tacttgggaa ttttgggaaa gaaccttttt tttgggggggg ggacatattg ggccaacctc 1260 cctacaaaaa ttaaaggctt tagggaaaat aaaaattttt aaagggtaaa gggggtaaaa 1320 caacctgcat ttccttgctg ttgaaaagtt ttttttccgg gttttaattt aaaaaaattt 1380 tttccccggg ggggggttgg,tttt 1404

```
<210> 5197
<211> 3111
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3113)...(2657)
<223> similar to gi4699963 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

60 aggagaatga agacatggta caagatgcgc tgcagcagaa cccgggcgcc ttcaggctag etcccgccct gcctgcccgg ccccaccgag gcctgagcac gttcccgggt gccgagcact 120 180 geeteeggge tteeceegaa gacceaeget tageggtgge ttettegttg etgtaattga 240 acgggtccaa gttgccgacc tcagcctcac aggccaaagc atcagcacca gaacgcacac ccagcccagc cccgaaagag aaagaagaga gcaaaaaagct gcagccggtg cttgcacacc 300 gccttgcaca tagcagaggc tccgggctca ctccttcctg gtggaaaagg aagatgcctg 360 tecteteegt ggaggaeeet gggeeeteac egeaggeage agtttgetgt tttgaaaggt 420 480 tattgggtcc cttcctcggg ctgtgttctt gctggtgagc aaaagtgttq cctgcagaaa taaaatgcag aacgtactct acgatagatc acagtttttt attcttaatg tcacaagcag 540 600 gagaaaaatc tcacattcat actaaaaatt ccaactagac tcaacaggaa tgaagtctct atttgtaatg gaaagtccca gcctcccgct gccgtccagt gcgtgtactg tacacatcca 660 cactcattct cactcagggt teceggaceg getgteetge etgeggaact gaggtaaact 720 agctcaggta ctgacactag gagggtctac cttacataag gtacaggtag aagcttgatt 780 getaggecca ggeccaecca gaccetecaa teetaacagg tatttagget tgaggtteae 840 teceteetea getgeacaeg eageeaggta ttaaegagga teagagetgt tetgaggggt 900 gggaaggagc agcccegcca ccactcactc accctcagtc acatcgggga gggggcacca 960 1020 gttacattta catcacatta tttataaaat aagaattaca tttcatataa catggccaga aggageteta gteccecagg aaagetgeeg gggacageat ttgageetet tetttgeaca 1080 ggcataactt aactatacag ctaattccta gttaatagca tttatactta accacctcaa 1140 tgaaccaagc ttgaaggaat ttaaaaggca atttagctta aatacaaaaa taaatttttg 1200 ttaaaaaacg tttaaatatt tttttctttt aatttagaca cacgcattca tacttctccc 1260 aaagaggttg ggcgtggcag caaggcgctt gggcctgggg tatgtggttt cagaaggacg 1320 gaaggaaagg atgggctgca gagggccctg tttgggaaaa ataggatttt aaaaatatgg 1380 ttcattaatt taggttttct aacatctact ttgggtgatg tagcctccag tgaggtcagt 1440 1500 taagtgggac agaaacggca gagggaagag gtctttgctt cccctgggcc cattctccct ggctgccagc ccttgaagtc agaacaccat gggaaaattc aggagtcggc acttgtagcc 1560 gtcaagtggt gctactttcc acattcaatt agcgaggccc cagaaaactt gaaacaggaa 1620 ' gtccggcact accaacatgc cgccactcat acaactcaac tettecteca aactcgatte 1680 aaagagcaat acacagagcg tcagacaaag gaacacagga caaggcttga aacatacaat 1740 cctggagagg cagacgaggg cccaatgggg ccaaagggta gctgggcgag gaggcagctg 1800 aagcageggt gggcateetg cetgetecaa gagettetee etteaceeet ggetetgeea 1860 ggctaacagt cttgagccac caagctctga ggggccaaac tggcagaggg ttggagatga 1920 aacattgatt caggettgge aggaagaaaa eggeaggage ageacecaet ggggteteea. 1980 aggcaaagct agattcaagg gcatttaaaa aggagggaat cctgcaagga actggtgagg 2040 gacacagcag caagaaatgg ggaaacagag tccccagaag ggaccagagg aagagaacca 2100 cttctcacag ctaagccaag caagataaag ctttacggat agcccatttc ccaaatccca 2160 tcaggtgcac accaccgate caggcgggct ggaccctgcc ccctccagcg acgacggtct 2220 cggggaaagg tggaaggggc gcctgcctaa gggtgtgcta agcgggagtc agggcagcgg 2280 acactatgta caggtgtttc cttagttctc cagcctcccc agtagaactg ttcaagtaga 2340 ggteceggge tttggecete egeateetge tteceettee etgaggettg tgetteetee 2400 agaagggaaa gggccccagg gctgccactg ccccctggcg gctgaagcca gagatccggg 2460 gtaggtttgc tttacgcaac tggaagggtc caaggctctt cctagcaggt gccaaggtcc 2520 agatttaggg aaggggtggg gggaacaggg acaggggaca aaggctactt tttgcgggtg 2580 tgctgccttc gggcctgcag tcgctgtcga gcccctgggg tcttggatcc cgcaccaatg 2640 gaaaatgaaa gggccgccga tccgaaaggt gcaacaccaa caaagccttg ggcgggtgct 2700 gaggatgccc caaaggagag gctgctgcct gatgtgccca ctccaggcgc aggggtgttc 2760 agaccaaagg tgggggtggc ggtgcctcca aacacaggtt tgctctcagt tgtgctgctc 2820 acgttgaagg caaacggtgt gctctggccg gtggtgccca gggcgttttg acctaagccc 2880 cctgcgaagg gggtggaggt ggctgtgctc ccactctgtc ctgctccaaa gctgaaagct 2940 ccggtggtgg tgctggagcc tggggtggcc acattgatcc caaagctccc actgccagcg 3000 ggggctgccg aacccccaaa cgtgaagggt gatggtgttg tgctgcccaa caccgagctg 3060 ctgctcccgc tgctggcggt ataggtggtg gctccaaaac cggagctggt g 3111

<400> 5197

```
<210> 5198
<211> 2169
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2150)...(1754)
<223> similar to gi1732423 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5198
ttttttttt ttgatatttt aacaaacgtt ccctttatta ggtttactga ctattatcaa
                                                                       60
cccatccata aaatagaacg ggagtttcaa aactgtacaa gccacaaggc tctgggctgg
                                                                      120
taggaaagaa gggtggggtc gagggtccca gggtgtcggg gggtgggaga tgcagagaga
                                                                      180
getagagggt cacceggeat etgtgaggae ggetgggtea aggeeataag etgggatetg
                                                                      240
tacaagggaa acattcatca gaatgtgacc cacctgaaac aggagggagg aaaatcttta
                                                                      300
aaaagtetta caggtaaggt ceeetgeeee egaaaaaaaa aacegteaaa ataataaggg
                                                                      360
ggtaatgtac atttctcacc cagtcttggc accaattttt gtgctttaaa aaatatactc
                                                                      420
cactgtaaga tttacttaaa aaaaggtact ctacagcagc tgtttaaaac ataattctta
                                                                      480
cagacaaata tatatatatg tatgtatata tattaaacat tttaaacaaa taaagtcatc
                                                                      540
tattgtacct gtgcagaaat gaaccaaagt tagactctaa gagagttaac ttcaagctca
                                                                      600
aagaaatggc aaaggcggtg gcaggtgctg gggtacgcta cgtggagggg ttgccaggga
                                                                      660
tagggcacce ctctcttccg gcagccgage tacccctctt gaggctctga gaggggttgg
                                                                      720
gatgaactgg ggctgttacc ctgggtccag agccccggct ggggtgctga gcagagaccc
                                                                      780
gegetggett etgtgagget egaetetget cetggtette eccateceae eetgeeeetg
                                                                      840
getteteggg gaatggagac ceaetegeec tecettetta gttetggggg teetetggea
                                                                      900
cacccagage ttetgaggat gecettggga aateteaget agaaaageaa aageaaaate
                                                                      960
aaaaccccac atcaaaagac cccacagaag actaaagaaa tgcaaccctg tgcaagggtg
                                                                     1020
cetgageeca agagttaget ggttacetgg agacacaggg gaattgetge agecetteea
                                                                     1080
gacgggcccc cgaagacacc cagattgcac gtgaggctat ttctccctga ggggcccgct
                                                                     1140
agggaacttg gagcagagcc ccctggaaac tgcagggcaa gggacccaga gacatacttg
                                                                     1200
tgcctgggca cgtgtgcaca tgtgcccagg gagggcgggc gaggcataca tatcccaggg
                                                                     1260
agggcacagg tggaaggaaa gtaacagaac agccagagag aggggactga aacagggttt
                                                                     1320
cctttctaga tggaataaat aaatggcttt tgttattgtt aaaagaataa atacagggta
                                                                     1380
cggggcaccg gcagccagga tgggtgctgg gtgcttattt gcctgcagac agttcttggt
                                                                     1440
ttetgeettg gggteeatgg tgagtttttg aegteetgag etttatetgt gtetttttte
                                                                     1500
aaagaggggt tgtatatgga cggcatgcag ggatgctgcc ttccgctgat gtcgggaagg
                                                                     1560
gggaaagagg agcctgtgtt ggaatcggtc cttgtcccat ggaggcagcc acggaggatg
                                                                     1620
agggaagacc agggacctct gtccatggct acggatgccg gtccaaggtg cagggtgcgg
                                                                     1680
cggccccagc ggcaggcggc tcagtgagtt ggcaccaggt ggctgtcgcg ctggcggtat
                                                                     1740
gatggcgaac gtcactggta gaggaggtag gccttgaggg aagccggcag cggcagcgtg
                                                                     1800
tggatctccc ccaggcgctc cctccccagg gccaggcgca ccgagcgacg gcacaaatcc
                                                                     1860
atgageggea geggeteggg ategagteeg tteaagtage geatteggat eteacagtgg
                                                                     1920
ccccagacgg cactcactac aggatacagt tttttgccct tgagtccccg aaaagccact
                                                                     1980
eccatgtact gtecatecae aatgaagete agagteegt egtecatgte eagggetace
                                                                     2040
aggaaggagt cagggacaat gaatgtctca tctggttcca gaaaggctgg gtatgttttg
                                                                     2100
cttggctggt tcttgccatc gtggtagagc cggttgcgcc ccaactcgtg ccgaattcct
                                                                     2160
gcaggcggg
                                                                     2169
```

```
<210> 5199
<211> 1322
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1325)...(678)
<223> similar to gi517115 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5199
tttttttttt ttgggtggtg aaggagtgga tttattggag cacaaggcag tgaagcagca
                                                                       60
aaagtgaaag tacattccac agggtgggag tgggctagag caagtggctc aagagccctg
                                                                      120
gtagcaaaat cttctggggc ttaagtaccc tgtagaggtt tcttgatggt tacaccctat
                                                                      180
gtaaatgaaa gactgactca cagccaatta gagactgagg tgaattggct cacagccaat
                                                                      240
ccaagactgg tgtggtttga ctccttatgc aaatgaatgt cctggaatga accaatcatt
                                                                      300
ggccagagtg caggtctggc ccatggccaa tcagaggctg atgtggtttg ataccttatg
                                                                      360
caaatgaagg teetggaatg gaccaateae aggeeagtgt teagaetett cagtgeeagg
                                                                      420
gagtgtgtcc aagtcatcct tagatcccta tetetgtace ctattetect geetcagtet
                                                                      480
tgtgtgagat tttgcaccct ttgaccatca tcatcatctc cccattcccc caatctctcc
                                                                      540
ctcaactact tctaaccact attcattaat ctcttgtatt atttaggtgt aaggaagaac
                                                                      600
agaaggatee aagtgtgaga aageeeaeee tgagtetete agaggtgatt atgaetgtgt
                                                                      660
gagcatgggt gagacaaatc ctctgttgtt gttgatggct acttgaagtg cttcctccat
                                                                      720
tettteeatt gtagaataet tagggaggga gagaatatta tgacaagtta ttgatgttgg
                                                                      780
gtgatctctt tcactgaaag tttcaggaca gcgaaatact atttccattt tctgtatgcc
                                                                      840
tettgeatge agectateae gteetgtaag gaaaaagagg aattttttet tttcatecaa
                                                                      900
ggttagtttg tggaaagcct tccaaaacaa ctgtatagta ggatgtgatt tttggtatcc
                                                                      960
ttgctcatac tttgaattct gttcaaactg tttccagtca taatcagtat ttccaatgat
                                                                     1020
tgctgtcatt agttcttcag ggtagaaatg tctaagtatc tccttctcac agactctata
                                                                     1080
aaateetete tgaaatteet cataaactge ttttacagag acgttgaaaa tgtaatcaat
                                                                     1140
atacttagaa acatagtete tettgttggt ttggtecaea ggtatggaga teccatttgg
                                                                     1200
aattaagtca acatcatttt ggtcccagtg tatagaaaag cgtatgcaga gcgcatctcc
aatgtcatca gcagcatcat ctagaacttc ttgcaaactc ttccccaacc gaggactgag
                                                                     1320
                                                                     1322
```

```
<210> 5200
<211> 1736
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (942)...(352)
<223> similar to gi212530 in the genepept database release 114,
```

```
<400> 5200
                                                                       60
ttttttttt ttcgaacctt gtggtttttt atttgacggg gcagatggag tcagtacaca
ataaataaca tgaatatagg aactgcgccg tatcgcggct ggcggggtgg ggcaagacat
                                                                      120
tggccagacc tttagtctgc agcaggacag aaggacagcc ggacccctga tcttgggcaa
                                                                      180
                                                                      240
ctggcgaccc gcggctggga accggggcta actcttccct cagagttcca cgcgcgcatc
                                                                      300
geggtaggee eggteeagag eccaeteggg etgtgagteg gtgeeceett etegggeaag
gegggecate teetgtttgg aacageeget tgeegegete ggetggggte cacattaate
                                                                      360
cagttgttgg caatccactt ggtgccgcgc gtgaccaggc agcccccgtg cagcgagtag
                                                                      420
ttgtctacgt cacccaccca accttgccca tcaggcaggt agttgtacca gaagactgct
                                                                      480
gtgccctgtt ggggcttgac acgcaggttt cccttgtcac agtgcctccg tgtgtcacgg
                                                                      540
aggtccacgt catcctgaat cagactcatt tcatcgtagg ttctgttatc tgctacaggg
                                                                      600
aaaacagtct cgcccccacc agtgacgttg ttcaaataaa acagcactgt catgtagcgg
                                                                      660
caggaggtct cgaagggtac agactcgttg gctaccagct tggtatggga gcagatggtc
                                                                      720
tetgggtaca caggeceact gtecaegtgg geatggtagt ggeceeecte accatatega
                                                                      780
                                                                      840
acaacctgca gcggctcgct gagctccacg atctcaggcg acaggcgagt gaggcgcagc
                                                                      900
accetetgge ggatggeacg catgatgtgg tgggeaccet caccetggta gagecaggta
                                                                      960
tggtggctgt tccgcaccag ctcactggac tctgccttgt ggctcctcat gtacttgtgg
aagtcccgaa ggtccatgtt ggagaactcc tgcagactca gcactccgtc accatcaggg
                                                                     1020
                                                                     1080
tcagccttga tcgcggcgta catctcctga atgctctctg gagtcatcca ccatccattt
cccaggcgag tetgggccag aacetcacgg agetgaaggt geccatcacg gttetggtee
                                                                     1140
                                                                     1200
agcageegga agaggteeag etggetgace tgeatagtge teattgeete tteatactet
                                                                     1260
tcagtaggca ggatctggct gcgctgtaac cccttcatct gcgccagatg gatgatgagc
cgacactett catcagteag gaageegggg atttegaaga geageggett gaggetgagg
                                                                     1320
                                                                     1380
gttcggatga agtgatccct gtcggtgacc agctggacct tacgctcgtg ccccaccttg
                                                                     1440
atgeceteca geegggtgag gggaeetaag gtgggetegg geeeggggee etgggeaegg
                                                                     1500
tgttggggcc cgggatcgct gctttcgtcg ccgttgctgt agtgcacgaa gagcagcagc
                                                                     1560
gccagcacgt tacccaggta caggtgcacg aacaccatca gcaccaggaa gtaggcgcgc
                                                                     1620
gagcagatge egeggggett geacagegga egeaceggtg egteetegee gtegeecage
                                                                     1680
acggccgccg cctgagcctg gcagtggtct ggcggcgccc actgcggcct cgaggcctcc
togtoctocg oggtotoaga coggtgacot gtoacogoog otgoogcoat ggoaco
                                                                     1736
```

```
<210> 5201
<211> 1203
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1206)...(1089)
<223> similar to gi2565048 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5201
ttttttttca gcttttcaga agttttatta taaagagatt tgagagaagc actgggcacc 60
aagacagaca ctcgccaggg ccaggaaaca gctgcaaacg acgtcaagaa cccaaaccca 120
```

```
aacgaaaccc caaaaccaca cacacggtag gataagctgt aacttcgttc tcaaggtttc
                                                                      180
ttcataaata gacaaaagtc gtcgccggca atttaaaata gatgaataca tgattaaaag
                                                                      240
gagagcagtg ctccggggtg gctagcaagc gtccggtcct tgctgtgagg atgacgaaac
                                                                      300
ggtttggcag ccgcttttgt gcgcgtctcc cttaagataa aacttaaaaa tgtgctaagg
                                                                      360
atcatataaa atgcttttta ccttaaaggg aaactacttt tttcccccac aaaatagtct
                                                                      420
                                                                      480
tacaqatqqt ctttcagcac aggttctaaa acacgtaggt caactactta cacggaaccc
                                                                      540
acaggtttct aggtttcgta atcttttgtt cacactggaa aaccgatggt gcacatctat
                                                                      600
gccgggggcc gggccctctg gcccatggca tctggggtgg gtgtccgttg gtaagcgacc
                                                                      660
ccgccagggg cggcccacct gggctggggc tggagctggg gccgggtgtc cagacatagg
                                                                      720
gtaccgtgcg cagggcgagg acagggtcca cagttaccct ggagcaagca ggtcagcggg
                                                                      780
eggaaggtte etgeaggtte tttgggetgg tggtgggeag tgggetgeet etgeagagte
                                                                      840
tggtgggagg ttgaggaaga gactcagccc ccgggcaatg ggtgtgtcac tgctctctcc
gatgggccac cctgcctctg gccagggcct cttttctgct gtcagccctt caggctctga
                                                                      900
gcagtgcctt ccagcgagcc tcagggatgg tagggaggcg ggattaggtg aggtagagcg
                                                                      960
atttgtccct ggggagcagg ctgcaggtgc tgatgccaca ctccccactg gggtagctgc
                                                                     1020
                                                                     1080
tgtcccagtc cccgctgctg gtggggttgg atgggccagg tgagcaggat cccgagctgc
                                                                     1140
tggggaacte agagatgtge gggaagteet gettetgtte eteteceagg etgteceaca
                                                                     1200
tggaggccac gattttggac acgtcaccga aagtggcact ggggttctga cccttgatgg
                                                                     1203
```

```
<210> 5202
<211> 566
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(171)
<223> similar to gi3342738 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5202
aagaaqatee tqtgeegeet ttteeggate tttgteeaeg tetatateea ceaettegae
                                                                       60
                                                                      120
egggtéattg tgatgggtge agaggeeeat gteaacacet getacaaaca ettetattae
                                                                      180
tttgtcacag agatgaacct catagaccgc aaggagctag agcctttgaa agaaatgacg
                                                                      240
ageaggatgt gteactaatg etecacetea ecetttggaa gaaaggaaag etgttteete
ctggtgccct gagcggcag gaggtggacc accetggctg aaatgacaca cetactecca
                                                                      300
ggaacagcag aggtggaggc aagcagtgac teetgagaga catteeccac teactttgtg
                                                                      360
                                                                      420
tgctcttaac cttctgagtg ctgctagccc agacctgtgg acgaggcaga ccacaacgtg
                                                                      480
aaagaaggac cagcccttg accgttctgg ctggggaatt gtccacgagg aagcctctgc
                                                                      540
acttccacac atggcacagt tetgeetgtg acetgeegee taagetttae tggaatteag
                                                                      566
gttttgagac tgagatgcgt gttcga
```

```
<210> 5203
<211> 456
<212> DNA
```

```
<220>
     <221> misc feature
     <222> (6)...(279)
     <223> similar to gi3878325 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5203
ataacttctc acagcctggt ggcctcactg ggcccctcaa ctactaccga aacctcttca
                                                                       60
ggaacttece cetggaacee caggagetga ceacacecae attgetgetg tggggggaga
                                                                      120
aggacactta cttggagetg gggetggtgg aagceategg cageegettt gtgeegggee
                                                                      180
gettggagge ccacateetg ccaggeatag ggeattggat cccacagage aacceccagg
                                                                      240
agatgcacca gtacatgtgg gcettettge aagacetget ggactagtgg teettgetgg
                                                                      300
cctgcccagg aggcatggat actcaggaag gaacacacac ccattatctg tgtgtgcctg
                                                                      360
ggagtccata caatgtccat acatgggtga actcttgaat cgctcatagg catgggactc
                                                                      420
ctggatccca cacaagcgca cctatgggtg cctcgg
                                                                      456
     <210> 5204
     <211> 1257
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (5)...(698)
     <223> similar to gi1228037 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5204
ctgcctggag gatgctgcgc cattetecta ccatagcacc ttectgctgg ctgaccgcac
                                                                       60
tgaggcgtgg gtgctggaga cagctgggag gctctgggct gcacagagga tccaggaggg
                                                                      120
ggcccgcaac atctccaacc agctgagcat tggcacggac atctcggccc aacacccgga
                                                                      180
gctgcggact catgcccagg ccaagggctg gtgggatggg cagggtgcct ttgactttgc
                                                                      240
tcagatette tecetgaece ageageetgt gegeatggag getgeeaagg eeegetteea
                                                                      300
ggcagggcgg gagctgctgc ggcaacggca agggggcatc acggcagagg tgatgatggg
                                                                      360
catecteaga gacaaggaga gtggtatetg tatggacteg ggaggettte gcaccaegge
                                                                      420
cagcatggtg tetgteetge eccaggatee caegeageee tgegtgeact ttettacege
                                                                      480
cacgccagac ccatccaggt ctgtgttcaa acctttcatc ttcggggtgg gggtggccca
                                                                      540
ggccccccag gtgctgtccc ccacttttgg agcacaagac cctgttcgga ccctgccccg
                                                                      600
attccagact caggtagate gteggeatae cetetacegt ggacaceagg cageeetggg
                                                                      660
gctgatggag agagatcagg tatcccccag ggagtagggg ctaccttgag gggatgatag
                                                                      720
acctcccca ctcccagtgg gactctggaa atatgaagga actagggagt ggaagagatt
                                                                      .780
tcagagctgg ggagaggagt tcctcccttc aaagccagca actgcctttg gggaatgtcg
                                                                      840
```

<213> Homo sapiens

900

960

1020

gggggtatet cettteteet gettgtgtga gggggtacae agteeceet teacetggeg

ggaagcctgt cccggacaga ctcatctcag ctttcccttg gggcaggatc gggggcagca

gctccagcag aaacagcagg atctggagca aaaaggcctc gaggccacac aggggctgct

```
ggccggcgag tgggccccac ccctctggga gctgggcagc ctcttccagg ccttcgtgaa 1080 gagggagagc caggcttatg cgtaagcttc atagcttctg ctggcctggg gtggacccag 1140 gacccctggg gcctgggtgc cctgagtggt ggtaaagtgg agcaatccct tcacgctcct 1200 tggccatgtt ctgagcggc agcttggcct ttgccttaat aaatgtgctt tattttc 1257
```

```
<210> 5205
<211> 385
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)...(135)
<223> similar to gi5713131 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5205 tcgacccacg cgtccgcttc aaggtctggt gtcctggggg tctgtggggc cctgtggaca 60 agatggcatc cctggagtct acacctatat ttgcaagtat gtggactgga tccggatgat 120 catgaggaac aactgacctg tttcctccac ctccaccccc accccttaac ttgggtaccc 180 ctctggcct cagagcacca atatctcctc catcacttcc cctagctcca ctcttgttgg 240 cctgggaact tcttggaact ttaactcctg ccagcccttc taagacccac gagcggggtg 300 agagaagtgt gcaatagtct ggaataaata tccctcctg agactgaacc aaacaaaatc 360 cttgacaaac actgaaatta taaac

```
<210> 5206
<211> 2551
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (251)...(738)
<223> similar to gi4680224 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5206

tttcgtggga aacttgggta tgaacctggg aagagggact tgaggcctca ctgggcattc 60

tctctgcacc tgtggcattg gagaagaaat cagaatttgc tctgtggggt taagggatga 120

aatgagtgcc cacctgcaca gtctaaggat ttaccatttt cagccggaag tggcctgcct 180

cttcactggt gaacagtccc taaatttcca gccttggtct cacaccaact ctctggattt 240

tctggccgca ggaattggat tcaagtacgt ggctctggga gacctcatca tcctcatcac 300

ttttggcccg ctggctgta tgttcgccta cgccatccag gtggggtccc tggccatctt 360
```

```
cccactggtc tatgccatcc ccctcgccct cagcaccgag gccattctcc attccaacaa
                                                                      420
                                                                      480
caccagggac atggagtccg accgggaggc tggtatcgtc acgctggcca tcctcatcgg
coccaegtte tectacatte tetacaacae actgetette etgecetace tggtetteag
                                                                      540
catcctggcc acacactgca ccatcagcct ggcactcccc ctgcttacca ttcccatggc
                                                                      600
cttctccctt gagagacagt ttcgaagcca ggccttcaac aaactgcccc agaggactgc
                                                                      660
caageteaac eteetgetgg gaetttteta tgtetttgge ateattetgg caecageagg
                                                                      720
cagtotgccc aaaatttaag gggacaagta gctcccccca cgacatgtct ccctttctta
                                                                      780
gaatatatta aagtcagagt ctctgaggaa ggaatgtgat ttggcagtca gggtactaag
                                                                      840
catgggtggg aactcctgcc ttataaaaat tgtttttgtg ttcttaaaga taatatgttg
                                                                      900
tttttctgtt ttttgttttt tccattttat ggggaattta aaaaccattc ttgtatcata
                                                                      960
aggtgaatta ggcgcatggt ctttgtttta ttaataattt ccactagagg gtgttctcag
                                                                     1020
gteactitige ggtgaagtgg acttagtice teetigtiet gtacaaaatg tetecagaet
                                                                     1080
ttgtaaagga gctgcccagt ttgggcctcc tgtcccgaaa agaccctaat aactaggcag
                                                                     1140
agtgttgtcc tgctttcttc gtctcgtagg atgtgctatg attggtgcca ggcctcacta
                                                                     1200
acacaggggc tacctgtctc ttattctcag cacctgtgtc ctgagatacg ctgcctgaga
                                                                     1260.
cagagagagt coctcattaa cagcotgtgt ggotgtcago tttttgccta aattgtgatt
                                                                     1320
cagatgettt tgttetetet cettteaett attgecaeag ttgaggaaaa gtgteagatt
                                                                     1380
accetgeage aagacaagee aaggaetggg agggaaaaaa aaaceaetet ggaggeaaet
                                                                     1440
gagaaaatca ctgcttttgg ataggaatca gtagggtggc tgttttccct ttgttgaatc
                                                                     1500
tactagagtg acaggaagga ctcccagccc tttcagtaac tatcaggagc cctgaaacgg
                                                                     1560
tagaggcact gccatccttg tgggatactc aaagcccaca gggcttttcc ctccctattg
                                                                     1620
catcttetga tgeteceeae acceaecete caeeteteea eetetgtggt gtteeeattt
                                                                     1680
gtgtgtttcc catctgtgga gccagactgt ttgagcaata gcttagcagc gagtcaggga
                                                                     1740
cagctgccac tttccacaga gccacaggat gggcagagca gggacccagg gaatgaatag
                                                                     1800
ccagtggaca aacagtettg agetetgtte agecagagtg atgggeeetg ccaqttaagg
                                                                     1860
ggctgtgtct tcatccttga agacagatgt gcaatattga ccctgcctct ccccagggct
                                                                     1920
ttgtggaaag atagttgagg getttagtga gateaeaete agagtgggge aatteeagea
                                                                     1980
tttateetgg etgegtttea ttgeattgte tgtgaagtat aatttetggg ceagaattge
                                                                     2040
teagttgeat ttgateeagg actatagatt ggaaatgggt cateattgtt ttetgttgtg
                                                                     2100
attatageca ttetagtagg egtttaaggt catggeetge agaaaatgat gtaagaacta
                                                                     2160
gttcttaatc tttcagatca agctaatgat gatatggaac cttgagttcg aattgattgg
                                                                     2220
tttacttgga aaaaaacatg tttgaaaatt gcaaaagttc cgccgggcgc ggtggctcat
                                                                     2280
gcctgtaatc ccagcacttt gggaggccga gacgggcgga tcacgaggtc aggagatcga
                                                                     2340
gaccatettg getaacaegg tgaaaceeeg tttetaetaa aaatacaaaa aattageeag
                                                                     2400
gegtgttgge gggegeetgt agteceaget acetgggegg etgaggeagg ageatggegt
                                                                     2460
gaacccagga ggcggagctt gcagtgagct gagatcatgc cactgcactc caacctgggg
                                                                     2520
gacacagcaa gactccgtct caaaaaaaaa a
                                                                     2551
```

```
<210> 5207
<211> 822
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (138)...(597)
<223> similar to gi5281051 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5207

```
aaacggaget tecacaaace agatagaggt tetecagett ttetttgatt gtetetgett
                                                                       60
tagegtetet aaateeggte accatgtegg acceegaagg egagacettg egaageacet
                                                                      120
ttccctctta tatggccgaa ggcgagcggc tctacctgtg cggggaattt tctaaagccg
                                                                      180
egeagagett cageaacget etttacette aggatggaga caagaactge etggttgete
                                                                      240
geteaaagtg etteetgaag atgggagaet tggagagate eetgaaggat getgaggett
                                                                      300
cgctccagag tgacccagct ttctgtaagg ggattttgca aaaggctgag acactgtaca
                                                                      360
ccatgggaga ctttgagttt gccttggtat tctatcatcg aggctacaag ctgaggcctg
                                                                      420
atcgggaatt cagagttggc attcagaaag cccaggaagc catcaacaac tcagtgggaa
                                                                      480
gtccttcttc cattaagctg gagaacaaag gggacctctc cttcttaagc aagcaggctg
                                                                      540
agaatataaa agcccagcag aagcctcagc ccatgaaaca cctcttacac cccaccaagg
                                                                      600
gagageecaa gtggaaggee tegeteaaga gtgagaagae tgteegeeag ettetggggg
                                                                      660
agetetaegt ggacaaagag tatttggaga ageteetatt ggatgaaggt tteggacaet.
                                                                      720
ttgttggcac ggggccttgg gggaaaggaa atctgggtgg atgcttcatg catgagctga
                                                                      780
aggcagaacc tgtcatataa tattagctga cgtgtacctg tg
                                                                      822
```

```
<210> 5208
<211> 1039
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1039)...(639)
<223> similar to gi4589520 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5208
ttttttttt ttaaaaaaca tgaaagcacg gtttatttgc tcctaaggtt tccctgtgtc
                                                                       60
gtagetetgt agtgegttga aegtgaeeaa ageaageaee etgggttage aeeagttete
                                                                      120
cetgtggceg getgtgtggg agggtgggtg geaeggetet gagacceagt etggagggte
                                                                      180
tgtgctgagg ggaagccgtg cttctctgtg tttccgactt tgctccagtc tcttctgtct
                                                                      240
ctgggaaget catggcagga tgetgtttgg tttcaaaget tcatgtgggt tetettttt
                                                                      300
ttttctctct ctgtctctct tttcatttca acggcgatga tcctttcccg agaagtatct
                                                                      360
tcagtgtctt agggaggtca cagcaacaag gcaaaacaat aattaaagta caacagaagg
                                                                      420
tagtgcagtt ctcgctgtgg aaggaagcgg tccgcaggca gctggcccgg gatgcctgca
                                                                      480
eccaggiega ggetgaagga eggggggiet eggigtiece geagetetaa ggetgitgget
                                                                      540
gggggctggc tcaggaagtc atcttcaggg tgatgtgggg gatgcaggtg gaatgcggtg
                                                                      600
aggagaagag gagggcgctg ggctccgggc ccctgtcaca gagtggactc caaagaggag
                                                                      660
tecaagatgt categtgatg getgttgetg ttggagtege tgteataget etgggggetg
                                                                      720
gagtagttgg ctgcctcctg cagcctcatc agcatgttca tcagcgggtc accttcagca
                                                                      780
teactggggg geatetgett gettgtegat eecteeegag geatggagta geegtegaag
                                                                      840
ecgacateet caggeegtaa etgeageagg ggaggeeaet egtgetgttg tgggetgget
                                                                      900
gcccatggat atgtgtccat cacccacttg gcaggatect cccagggggc gcgccttcca
                                                                      960
tagagetgga gteettetet gaeggettee aggagatagg ggataatgga atagtteeae
                                                                     1020
aagtcggtga accactctc
                                                                     1039
```

```
<210> 5209
<211> 2061
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (161)...(1451)
<223> similar to gi289760 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5209
                                                                       60
cteggaceca cagageegge ceetgetget getegggeag etgeaceace tgeacegegt
                                                                      120
gecetggage caegteegeg ggaagetgea geeeegggte aeegaggage tetggeagge
tgccctgage acgeteaace ccaaceccae ggacagetgt cccctctace tgaactacge
                                                                      180
caccgtgget gecetgeect geagggtgag ceggeacaac ageceetegg cegeccaett
                                                                      240
catcacgegg ctggtgegga cetgeetgee geeeggageg categetgea ttgtgatggt
                                                                      300
etgegageag eeggaggtet ttgetteege etgtgeeetg geeegggeet teeegetgtt
                                                                      360
                                                                      420
cacccaccgc tcaggtgcct ctcggcgctt ggagaagaag acggtcaccg tggagttttt
                                                                      480
cctggtggga caagacaacg ggccggtgga ggtgtccaca ttgcagtgct tagcgaatgc
                                                                      540
cacagacggc gtgcggctag cagcccgcat cgtggacaca ccctgcaatg agatgaacac
cgacaccttc ctcgaggaga ttaacaaagt tggaaaggag ctggggatca tcccaaccat
                                                                      600
                                                                      660
catccgggat gaggaactga agacgagagg atttggagga atctatgggg ttggcaaagc
egecetgeat ecceeagece tggeegteet cagecacace ecagatggag ecaegeagae
                                                                      720
categeetgg gtgggcaaag gcategteta tgacaetgga ggeeteagea teaaagggaa
                                                                      780
gactaccatg ccggggatga agcgagactg cgggggtgct gcggccgtcc tgggggcctt
                                                                      840
                                                                      900
cagagcegca atcaagcagg gtttcaaaga caacetecac getgtgttet gettggetga
gaacteggtg gggcccaatg cgacaaggcc agatgacatc cacctgctgt actcagggaa
                                                                      960
gacggtggaa atcaacaaca cggatgccga gggcaggctg gtgctggcag atggcgtgtc
                                                                     1020
ctatgcttgc aaggacctgg gggccgacat catcctggac atggccaccc tgaccggggc
                                                                     1080
teagggeatt gecacaggga agtaccaege egeggtgete accaacageg etgagtggga
                                                                     1140
ggccgcctgt gtgaaggcgg gcaggaagtg tggggacctg gtgcacccgc tggtctactg
                                                                     1200
eccegagetg cactteageg agtteacete agetgtggeg gacatgaaga acteagtgge
                                                                     1260
                                                                     1320
ggaccgagac aacagcccca gctcctgtgc tggcctcttc atcgcctcac acatcggctt
cgactggccc ggagtctggg tccacctgga cattgctgca ccggtgcatg ctggtgagcg
                                                                     1380
agccacagge tteggtgtgg eceteetget ggegetette ggeegtgeet etgaggaeee
                                                                     1440.
tetgetgaae etggtgteee eactgggetg tgaggtggat gtegaggagg gggaegtggg
                                                                     1500
gagggaetee aagagaegea ggettgtgtg ageeteetge eteggeeetg acaaaegggg
                                                                     1560
atcttttacc tcactttgca ctgattaatt ttaagcaatt gaaagattgc ccttcatatg
                                                                     1620
ggttttggtt tgtctttctg gtcgtcagcg tggtggtgga aacagctgaa gttttaggag
                                                                     1680
acagettagg gtttggtgeg ggecaegggg aggggaeegg gaagegetgg ggettgttte
                                                                     1740
tgtttgttac ttacaggact gagacatett etgtaaaetg etaceeetgg ggeettetge
                                                                     1800
acceeggggt gaggeeteet geetgeetgg tgeeetgtee eageeeeagg teetgtgeag
                                                                     1860
ggcacctgcg tggctgacag ccaggctctt actccagccg gggctgccag cgcatccagc
                                                                     1920
cagcccagcc ctgtgaaaga tggagctgac ttgctgcagg ggacctgatt tatagggcaa
                                                                     1980
gagaagtcac actccggcct ctcagaattc acttgaggtt caattaaata cagtcacacc
                                                                     2040
gcccctcaa aaaaaaaaa a
                                                                     2061
```

<210> 5210 <211> 1156

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1157)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1156)...(429)
<223> similar to gi4567275 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5210
ttttttttt ttattagaaa tgacgttgtt actaaaaagc cacacaatat cncatttaga
                                                                       60
gaatatgett aacaaaatat acatettaaa aatteageae teeagaatge ttttteaggt
                                                                      120
gtttccattt gagaaataaa gaataaaaat tggtaataat tatagacaca acttcataca
                                                                      180
ataatetgga taatatgeaa gaageateat gttgaettte agatatttet etttgtgget
                                                                      240
aacgaaccac acatcaaagg atggaccaaa gttcagatgt acacagtcca gggcacctcc
                                                                      300
aagcacagtg gcagtgccct tggggatttt ctttccctca gtgagagaca cgggggatgg
                                                                      360
ggaggagccc aggagtgtca ccagaaagta cacaacccag cttcttaccc agcctgctgc
                                                                      420
catcatcaac tatcaaacca tttgctcctc tttgcaagag gtgctccttt agaaggtccc
                                                                      480
aataatttet gettatattg ttegaecage tggttgaage gggttteegt ettattteee
                                                                      540
ttagcttttt tcctagatac ctgctcggac gataattgct gcttctcctg cttccactgg
                                                                      600
tttatctgtg gctttggctt tttgggatgg acgggcttca ctttgccttt gtcccgcaac
                                                                      660
ctgattttgg ggcctcggtg tgaggggagc gccaggacct ttcttctctt ctttccatca
                                                                      720
ggcageteca cetgetecae tteageettg gtetggaace eggtecatga ggtagageee
                                                                      780
geetttetet tetgetetgg gggeacettg etttgtteet etgtgtggtg ttgagetgee
                                                                      840
ttetgttget ggtettttge aggetetggt tgeecettet gaggeteace agttgeagge
                                                                      900
ttggatetea ttttttgeaa getgegetgg ateettaatt cetteatttt aagttttett
                                                                      960
cgatcttcta aagagaactc cactattggt ctcttcagag gcccaaagat ttctggattg
                                                                     1020
ttgttgatga ggcggagggc tttcagggca tgctcgtgct cttggaactc cgcaaaggcg
                                                                     1080
tagcccaggg actgaccett catgttgcca tgaacteett tgaggtateg catcacteta
                                                                     1140
cactccttga tgcgca
                                                                     1156
```

```
<210> 5211
<211> 1766
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) . . . (1767)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1) . . . (1098)
<223> similar to gi5732946 in the genepept database release 114,
```

```
<400> 5211
atggacaggg cggcgctcct gggactggcc cgcttgtgcg cgctgtgggc agccctgctc
                                                                       60
gtgctgttcc cctacggagc ccaaggaaac tggatgtggt tgggcattgc ctccttcggg
                                                                      120
                                                                      180
gttccagaga agctgggctg cgccaatttg ccgctgaaca gccgccagaa ggagctgtgc
                                                                      240
aagaggaaac cgtacctgct gccgagcatc cgagagggcg cccggctggg cattcaggag
tgegggagec agttcagaca egagagatgg aactgcatga tcacegeege egecactace
                                                                      300
geecegatgg gegeeageee cetetttgge taegagetga geageggeae caaagagaea
                                                                      360
geatttattt atgetgtgat ggetgeagge etggtgeatt etgtgaeeag gteatgeagt
                                                                      420
                                                                      480
gcaggcaaca tgacagagtg ttcctgtgac accaccttgc agaacggcgg ctcagcaagt
                                                                      540
gaaggetgge actggggggg etgeteegat gatgteeagt atggeatgtg gtteageaga
                                                                      600
aagtteetag attteeceat eggaaacace aegggeaaag aaaacaaagt aetattagea
atgaacctac ataacaatga agctggaagg caggctgtcg ccaagttgat gtcagtagac
                                                                      660
                                                                      720
tgccgctgcc acggagtttc cggctcctgt gctgtgaaaa catgctggaa aaccatgtct
tettttgaaa agattggeea tttgttgaag gataaatatg aaaacagtat eeagatatea
                                                                      780
gacaaaacaa agaggaaaat gcgcaggaga gaaaaagatc agaggaaaat accaatccat
                                                                      840
                                                                      900
aaggatgatc tgctctatgt taataagtct cccaactact gtgtagaaga taagaaactg
ggaatcccag ggacacaagg cagagaatgc aaccgtacat cagagggtgc agatggctgc
                                                                      960
aacctcctct gctgtggccg aggttacaac acccatgtgg tcaggcacgt ggagaggtgt
                                                                     1020
gagtgtaagt tcatctggtg ctgctatgtc cgttgcagga ggtgtgaaag catgactgat
                                                                     1080
gtocacactt gcaagtaacc actocatoca gcottgggca agatgcotca gcaatataca
                                                                     1140
atggcattgc aaccagagag gtgcccatcc ctgtgcagcg ctagtaaagt tgactcttgc
                                                                     1200
agtggaatee etagaacett ggaeetgaga gttteeetta eetgategae atatttteet
                                                                     1260
ttatetgate aaceeateaa teatgtggat ttettgggat tetaatgttg aaaaggttta
                                                                     1320
tattcacctt ttgatgattt ggggaatata tattgacata caaggaagat aatctgtttc
                                                                     1380
ctaagcaaga aataacagga aagatccctt atgccaggag gcctgccata ctcaggataa
                                                                     1440
gatccttgaa tatggaactt agttacagga ctcantaatg gtgggtgaac attagtcatt
                                                                     1500
tttaaaagac acctettata geaataagga gacattaaca tgaateteat ttattetete
                                                                     1560
agtattttaa cttgagaaaa tatactgttt gttgtggata gaagatgttg aaaagtaaca
                                                                     1620
taagecatgg tgetgaetae cetttatgte tttcaaagaa ggtaatcana aagatettet
                                                                     1680
agtgaatata teeetaaaaa agateataeg atgttatgae aagateatat taaaaggtat
                                                                     1740
gaagattaaa ttaaggcttt cctgaa
                                                                     1766
```

```
<210> 5212
<211> 1136
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (29)...(175)
<223> similar to gi2887409 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5212
gaattcccgg gtcgagcttg agcccgccga ctgcggccag gacaccgccg gcgcgcctcc
```

```
eggeegeege gagateegeg eegeeatgea gtttggegae aeegaaatta aggteaeege
                                                                  120
                                                                  180
egtegaegte ageaceaate geteegtgeg egegteeate gaetttettt ceaactgagg
gegegeegge geggtgeeag egeegtetge eeggeeeege eetetttegg tteaggggee
                                                                  240
tgeggagegg gttggggegg gggaaacgat agttetgeag tetgegeett tecaegeeet
                                                                  300
ccagcccgg gggagataag gtcatgggag agtgggtggg gacacacca gagactggct
                                                                  360
ttgggattgg gcactggtcc gctgactgcc aggctgaagg gacccgccaa ggactgaacg
                                                                  420
ggtaagagaa gaggtttgca agacagagcg cgcagcccgg caaggggcat gtgaccccga
                                                                  480
aggaagaacg caacagaaga gtcctggtct gaacttggcc gagtaggggt gggggtggga
                                                                  540
                                                                  600
tggcaggagg agccgcagga ggaaggaggt tgtgcagggt ctggacctgc agggctgaag
                                                                  660
ttcactcatc gaccgactca gccccaaccg ggagccaggc agaaaaaccc tgtgccgtag
                                                                  720
780
etgaceacce aaatatgact gtgaattgtg gaaagggeag tagateteta atgtggaggt
                                                                  840
gggaacatta ttgtggtgga ggcaattatg agggtagcat ttctttcgag acaaaacacc
                                                                  900
cgtctgggaa ggccccaagg tcagcttatg aaggacccca cttgcacccc accccagcca
                                                                  960
tggaagagca gctggagggt ggatggggag gccagaggga gcaatgaggg gtggtcccag
ctctgctatt gactcggtat gcctttagga cattctctta ccgctcatgg gcctcagttt
                                                                 1020
cctaaagtgt gaaatgtcag gcacttccct ctaactggca tgcaacagcc ccacctgcct
                                                                 1080
gagagecetg aggtgacaat aaaacattta tgetcaaggg gagaatacaa aaaaaa
                                                                 1136
```

```
<210> 5213
<211> 1048
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1017)...(485)
<223> similar to gi5824476 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5213
ttttttttt ttaattaaaa aatgttttat ttatacaaat ggacaatcag aggccagtcc
                                                                       60
cccgtccttg ccttccggct ccagtgtggt gtaccaggtg gccactgcct gctgtcccgg
                                                                      120
caagcacgtc ctcacgctca gctctggccc gcctcgtcgt cactgtcctc aatcagacag
                                                                      180
teceggatet cetgeaagee ceaggeeete tgtgtgegga egtgggeete ageeaggatg
                                                                      240
tacggcggca gggggtccag tgagggtcac caagtccttc atgttcacgc ggcagctgta
                                                                      300
gcacagetge tectcaatge aggetttggg gteeteeete etgeaggeee eetggeegea
                                                                      360
gcgctgggcc cagcccaccc ctggagaaca gcagggcccc gggggtgtcc gggtctcagt
                                                                      420
cagggggatg ggtgactgca tctgggagag acgcgaggag gtctgagccc caaaagccgt
                                                                      480
ggcactgtca gcggcgtcga cgtccagggc acacatgcag aggaggcagc gggggccgga
                                                                      540 ·
gtcgccagca gcagggccat cccgggggcc cttcaccagc ttctcacttg tcctgtacac
                                                                      600
agtgctgaca gtggagggga actgggtctg cagcctgagg atgaaggcct ccatcagccg
                                                                      660
gtggatgctg gccttttcag gggccttggt gtcgacggct ggtgtgaaga cagaaggaac
                                                                      720
ggagaacagg cggttgtaga aagcgacctc cttcagggtg tggtcccgca tgggccgcac
                                                                      780 -
caccaccacg teceegtgee geteateega gaageeegta teeeaggeea ggaaggeeee
                                                                      840
togaccoago gocaggitgg toatgagott gatagocaag cgtgtgcago tgtccccagt
                                                                      900
catgacettg gagtageegt gggeteggge caegtggagg atcaggtggg teegcagggt
                                                                      960
ctgcagaagc tcctccttgg cagtcagtgt cctcactgag cagaacagtt gggaaagagc
                                                                     1020
ctcagtctgg gcaggggcag gcggtctt
                                                                     1048
```

```
<210> 5214
<211> 1053
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (637)...(919)
<223> similar to gi1002786 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5214
aaacaataca cetgteagtt tecateaact atagcaatec atgcagaaga caagaggeee
                                                                       60
cctcaaagca ggaggggtat tgttttaggt ccaatttttc ttattgttct caaaatcatt
                                                                      120
ataaggtgga cagtgttttg tgaagatttt cttttcccca gctctaagaa accatgtgga
                                                                      180
aagaattcat tgataactgt tttgattttt ttcttttttt aagtacaggt tttgctaagt
                                                                      240
aatcaccctt agtgagcctg tgtagttcag ctgcctgtga gatgtttggt gaccagctca
                                                                      300
gtgtattett gtattettga tagagaatat tteaggagae aaaagtgett etteagaeea
                                                                      360
gacctcaaat aacaatttta ttctttttaa taaataagac ctcagtaggc ggacctgata
                                                                      420
acagtgacaa tgaaaggaaa atagtggcaa aatgtgagtt tccagcatga tgtttctcat
                                                                      480
tttattttct tctgtatgaa tcaaaagaat gctttacaaa accatgttcc cttaatcaca
                                                                      540
gtgttctctg gcttttatag gattgtcata gccaggacca cactattgct ttttcataac
                                                                      600
attitictitt tgittictitic tittigaatti cittacagggc tgcaaagtat gccaggggag
                                                                      660
tatgtagccc ggggtggtcc aatgggtgtg agtatgggad agccaagtta tacccaaccc
                                                                      720
cagatgeece eccateetge teagetgegt catgggeece ceatgeatac gtacatteet
                                                                      780
ggacacecte accacecaac agtgatgatg catggaggac egeeceacee tggaatgeca
                                                                      840
atgtcagcat caagccccac agttcttaat acaggagacc caacaatgag tggacaagtc
                                                                      900
atggacatte atgeteagta gettaaggga atatgeattg tetgeaatgg tgaetgattt
                                                                      960
caatcatggt tttttctgca atgactgtgg agttccattc ttggcatcta ctctggacca
                                                                     1020
aggagcatcc ctaattcttc atagggacct tta
                                                                     1053
```

```
<210> 5215
<211> 2210
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2211)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2212)...(1523)
<223> similar to gi407419 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5215
ttttttttt ttctttaaag aaaacaagtt ttatttttat catcagaaca ttctaataaa
                                                                       60
                                                                      120
aatattatga tgagattage tacetttatt etetgageet tgaetetgte acaggeetge
                                                                      180
cctgggngeg cctgcacgct cagctccctg aggtaggtcc ggaggggggg agaccccccc
getgecece geceetnggg cagggatace etttacettt aatggteece teetteeaga
                                                                      240
                                                                      300
cccccaacag cccttgggat gccccattag cagccttgcc acgggttggg aagaaactgg
                                                                      360
cctccacct ccaccaaccc ccaagacagg caaggaaacc gtctcagggc tgggcacaac
agcaggtggt gcgggggtag agggaagagg cgcacccttc tgcactcaac cgctccagcg
                                                                      420
ggcagagetg agggccaetg ceeecceag getggcaeca ceatggteta gaccecaagt
                                                                      480
                                                                      540
ggcctgaatg ctgtggatca cttccttctc cccttccaca gtgtttgggg agttggggag
                                                                      600
gaagggaagg gagaggagtg tcaacgtcgc agtgacgggg tcctgagaca actcactctg
                                                                      660
ccacccggc aggcggcagc agacagtggc ccgcacgggc ctgaggggcc tcctgtctgt
                                                                      720
ggtgcccatc ccaccgagag gatcctggcc cgcgagccgg cagacacttt attatacaga
aacactatcg tcgtctccac gggcggaacc aacaaaagca agtctctcca agtcaaaaat
                                                                      780
                                                                      840
aggttttgga ttettggtgg eggeagtate egetgaaaaa atagaetgaa ettetgaaat
                                                                      900
tatcttagta gcaaaacaat tacaagaaaa aagttgcaac ttcagtgcta tgactggaaa
ggggcctttg gccggcggcc cctgttaccg gcggcccctg tgcgcctggg agctcctccg
                                                                      960
                                                                     1020
ggettgagga ageegeeeae gtgeeetgat ggagaaaatg ggaeteeaae aggaggeegt
gteeteacae eteagaetge geteacaget egggaggate aagttacaat aaacagteea
                                                                     1080
ttaacttett gettteaggt tteeetggag teaggeatet etgeacagte eagggeagee
                                                                     1140
aggggetgea gagggtetgt gacacceege cacgatgeag cagtggggae acaageetga
                                                                     1200
gggaacctgg agtgtggaga ggcaggagaa ggtgcaagga gaggctgcca tggtgtgcaa
                                                                     1260
ggaacctggg attgcgtctt taaatagttc tcagtcattc ttaaagtcct ccctcaagac
                                                                     1320
acaatgggac ctagattaaa gagaageegt eteteegetg teecagggeg caggeggaat
                                                                     1380
geeegagegg tetteggagg caegggtget ggtggcacet caetgaaget cageeggget
                                                                     1440
gtegecagee cateatggee tggeagetet gtetgetgtg aaggtgacaa tgecacagte
                                                                     1500
cteggggeag gaacgeeect cactgeatee tgteaggetg cagetgegge geetggtaet
                                                                     1560
                                                                     1620
gcacgaaagt ggtgcccgcg ggtgctgcgg ctgagagggc ctggggcacg gcggcagggt
agetgtagee caegaagetg geageegtgg caggegagge ggegtatggg taetggteat
                                                                     1680
aggtggccgg tgggtactgg gcgtaggccg ggctggccgg cgtgtactca atgtagggcg
                                                                     1740
                                                                     1800
aggacagega egggacaggg geggetggga teaceaeget gggetgeaeg atggetggtg
ggtagatgta gtgcggggtc agcccgtaag tccgctggat caaggtgggg tgcagctgct
                                                                     1860
gcaccccaat ggcaaagccc gtctggaggc tccgcggctt ggcgcccaga tatgccaggt
                                                                     1920
                                                                     1980
teaegttgge ettgeggeeg tegatgatgg ggttegggte tttgeaagee eteteagetg
                                                                     2040
eegeeeggte ggeeatggte aegaageegt ageegeggga ettgeeegte tggeggtegg
                                                                     2100
tgatgaccac ggcctcctcg atgtcgccga agccctcgaa gtacttcctg agcgaggcgt
eggtagtgtg gtaeggeagg eegeeeaega agatettggt gaaegtggtg eeettetgeg
                                                                     2160
ageegtacat gaegeegggg geggeeaggg geegegagaa accegegete
                                                                     2210
```

```
<210> 5216
<211> 1909
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1910)
```

<223> n = a,t,c or g

```
<220>
<221> misc_feature
<222> (1909)...(1473)
<223> similar to gil668766 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5216
agttcctaaa tttgggggaaa catagtgaat tccacataat gttttaaatt attcagccac
                                                                       60
                                                                      120
taaaaataaa tttacatatg atttcattaa tatattcact atctaaacca tattttttac
actacgtaaa atacattgta tatgtacagt gagtgatgct ttttgcttta gttctcattt
                                                                      180
ttcacattaa ggggaggaaa gctacccata gatagtattc ttactccttt tcacatgctt
                                                                      240
caaggacagt ttgcaagtgg atataaatac atacacatca ctagtgatta tgcttttatg
                                                                      300
ttatttccaa cttcttatag gtaacataat tttcagacaa tgttagctgg ttttaaaccc
                                                                      360
                                                                      420
aatcagtaaa ctggcattaa aggattetta ataaaccaaa cactgaagge ctettteata
tttgtatcat ctgcattttt ttttatatgc ttgtcatgtg gctttacttt cagcctcact
                                                                      480
                                                                      540
cttttcttct tccaaatgga ttatccttaa accttttacc tttaaagagc ctgagattta
                                                                      600
tatttaactc gaacaacagt tigcctctgt tgcccctgtg ticatgtttt cctaagccag
                                                                      660
agtttcccac gcctcctgtt cctggcagcc caagtgcctt cgctgggcta ctcccacctg
geeettgett tteatteett agggeagtea ettageacet teeaaagtge etgeaeatgt
                                                                      720
                                                                      780
ttcttatttc atttcttaaa cattcatatt accactattt agattgaagg aacagaattg
                                                                      840
gtttgggctt gaagagaata caaagagatc tgtcttcaat tatctgatag tagtaaagtt
                                                                      900
tcacgggaga aagaaagatt tcggttccac ataaggaaaa acttggaaag ttttgaatgg
                                                                      960
aaagttcata gagagattca gtaaccacct gtcaggaatt ttgtaaagac gtctacggcc
atateacect gaacgegeet gateteatet gateteggaa getaageagg gtegggeetg
                                                                     1020
gttagtactt ggatgggaga aattttataa agaacacatg aacactagct ggcctatgtg
                                                                     1080
                                                                     1140
geetttaaaa tetetteeaa teetgagatt eecacaacte tggataaaaa ggggcaaaag
tattagacat ttcactccca ttaatatgag ggaagtaaat gacattgagg tccaatttgt
                                                                     1200
ctgtagttca gaattagtcc aatacagacc cttagaccaa ctagggaaca aaaagcaagc
                                                                     1260
atttcaagtt acctataagc ctgggctcat cagaatatag aaacagccat gtgctagctg
                                                                     1320
aaagccattc aatgaggctt tetattaatt: teetttaaaa gcaatggtta ttattgaaac
                                                                     1380
tectaaatge taaaatetga aggaceeate ettatatata agttetgate ataetgaaae
agtcatttag caacattgct cigatgtcca ggaccetggt ctgtaatgaa agcaatgaag
                                                                     1500
ggaggggctg gcagggcact actggggtgg tataggggac actgcttata ttcacaaggc
                                                                     1560
caegtggtcc aagcatagcg gagagcaacc acagtgccat gacaagaatc gatcgccagg
                                                                     1620
gtcagggact gggtggagac ggtgttcata gaagctggaa gccacttgca tcgatggtca
                                                                     1680
ctgcaacagg agatetcaaa tatettgttg teetttttet geacetggat ttgctggtaa
                                                                     1740
tatgtgagat tgagcagccc cttgtgagcc aagagttcta tcttctcagg cagtggtcct
                                                                     1800
tcaaaggtca aattettete accataagee agageaeggg cececaaatg cageegataa
                                                                     1860
gccacagtet gtttateteg gcceggtaat tecaaecegg ntgaegtea
                                                                     1909
```

```
<210> 5217
<211> 1462
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1463)...(1171)

<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5217
                                                                       60
tqaqqqcccc, tqtcaagqcc cccaccctcc tttttctgtg tttagtgagg gtgtctgatg
                                                                      120
cataactgag cctcagttgg gaggggctga ggggatcggg aacacttcca aggggaagca
                                                                      180
gctggggtga gagccccaag gtggagagaa cttggcaagg ttgaagagga atggtgggca
                                                                      240
ggggagggag aagagtaaaa gaagaggcag ttagggctgc ccgggtcagt ctgggaactt
                                                                      300
tggcttcctc ttcaggtcac taggagccat cagagggtta agccagcaga gacagcttcc
                                                                      360
tgtttttaag acgttggtct ggctgctgtg ccgggagcaa gagagaaaga gacttggggg
                                                                      420
agttcagaag aggtgacggt ggtggaggaa agtggatgga tatggggtct ctttcagagg
tagaacagtg gggtctcttt cagaggtaga acagtgggac cttctgacca ctggcaggta
                                                                      480
gagggtaagg gagaggggaa ttgggttgcc tgctagtttt tgctttaact aactgggtag
                                                                      540
atgctgatgt cattcactga ggaggaagag ggcaggttga gggtaggtag aaattcacag
                                                                      600
                                                                      660
ttttggtttg gttgtagttt gggatccctg tggacaagaa aagtttccat gggtatatta
                                                                      720
tgaatgcctt ctgaatcaag ggtttaaatc acatcctctg atttattctc cccaaagacc
                                                                      780
actagatgcc gctgtttaca cgggagcaat tatgcagtac aagactcctt tcctgaggag
agggcacgga tgccggagag ggtactgatg ccggagaagg cactgatgcc tgacagggga
                                                                      840
                                                                      900
acceacagag aggggageee etgeetttga gggggttaet etttaetggg agacateace
                                                                      960
cttcagtgtg gtcttcagac acatgtgata gcagtgtgac ttcatatggg atagaaagct
                                                                     1020
agggactagg tagtgtttga gctgggtctt cagggttgca aggcatttca ggtgggggca
ggacgeteca ageagaagga acageeggge aacagagege atetecetge ttatggggta
                                                                     1080
                                                                     1140
gatggtacag tgaagaggtt attggcatag ggggttggac ttttcagtgt ttctcaacaa
                                                                     1200
aggcacagtt agccttttaa agaaggacgg tttttggctg ggtacggtgg ctcatgcctg
                                                                     1260
taatcccagc actttgggag gccgaagagg gcagatcagc tgaggtcagg agttcgagac
                                                                     1320
cagoctgacc aacatggaga aaccetgtet etactaaaaa tacaaaatta ceeggeeatg
gtggcacatg cctgtaatcc cagctactcg ggaggctgag gcaggagact cgcttagacc
                                                                     1380
                                                                     1440
caggaggcgg aggttgtggt gcgctgagat cacaccattg cattccagcc tgggcaacaa
                                                                     1462
gagcaaaact ctgtctcaaa aa
```

```
<211> 1689
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1690)...(667)
<223> similar to gi4336692 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<210> 5218

```
<400> 5218
tttttttt aggcagaagg agtcagagag gttgccttta atagctcagt tactattgtt 60
tatgttgata aagggtctgt taatgtattg ccaaaagaga accaggaaaa gaggtccagt 120
tttgggaagc acttgcctta cttgtacccc gctcactctc aactgaggct cctgtgatga 180
gcacagtggg cacacacccc atccccaacc tgtccacggg tccctgggcc atggtgggt 240
tgggagtgac actgctatga ggggaacgtg gagagctggt ggctcactca tggtgagagg 300
ctcaagggcg gcagtggct tgcagcaaag ttggcagctg gagcagcgtg tggggcccgg 360
gaaggaactg ggaaggagca gacagggtgg ggctgggga actgccaagg atcccgagcc 420
```

```
aagccactgc gaaactgaga agggtgcttg ccacatggga gccacttcgt ttggctaagc
                                                                      480
attgggtctg ggttcaggag ccacgatgct gccccgggta ccccccctgc caccgtggca
                                                                      540
ggtgtggcac agacacaggc ctctgccaac agggcagctg ggcacgctgg gcactcaggt
                                                                      600
                                                                      660
tgeettetee tteeegettt ceattggtte etcetteagg tteteggtea egagetteat
ttgctgctgc ttgagtgcct ccaaagactc aaattccagt ctggctagtt tcatctggat
                                                                      720
atgccgtggc ttatcaggta tggcaaatgc aagtataaac tttaaagcca ggagtgcgtg
                                                                      780
ctccactgct actacaatca aaatgaggtc tgcttttgat tctggaaaga ctgcattcac
                                                                      840
ttgtggtgac attccaatca gcgcacagtt agtgaccaca gatataacac tcatcatttc
                                                                      900
aaaagccaac tgccacacac caatattggc tgaaggttct gagaatggac gtttgaagac
                                                                      960.
cctgcacatt tttaaggcat ctgaatttac ttcagtgaag ttatttaaca cagcaaaggc
                                                                     1020
agetgetaat gggtaaacae aggagaaaag geteacataa eeaaaetgea ggaataaete
                                                                     1080
caagtaatca tcaaaggtgc ccaaataagt tcccatttct ttttccagga tgacttgttc
                                                                     1140
atataatgta gcatcaatgt ctgcctttaa agcctgcacc ttcctcttca cctgcacacc
                                                                     1200
atgetteett tggageeaat aaggaagaaa agatteeata atttggttga ggatetggga
                                                                     1260
ggtaattagg agagtggcca agctctggcg caaaagcttc atatctttca agacaaaggc
                                                                     1320
aatatagaag agtgaggcaa agcaattgag gaagttgaac actaaaactt tcagaattag
                                                                     1380
atqqttctqa taggcagatt ccaatctgtg attctcccat gaagttaaaa actcggcagc
                                                                     1440
atategatag agaegattea tgateteaat eacaatggea tagatgatge tgggeacata
                                                                     1500
caacaggaca ctggtccact cagacccgct gttctcatgt agacccaagg cccaaacctc
                                                                     1560
catgtcgaag taaatcatca tgacatacag tgagaaatag aggcagaggc acacgaatgg
                                                                     1620
cagggagace aggtaaatge geaactgtet ettgtagetg gggtacagag geteeteett
                                                                     1680
                                                                     1689
cccagtgat
```

```
<210> 5219
<211> 458
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (44)...(142)
<223> similar to gi4235143 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5219
gagaateeca geaagaatea cattaetttt ttetaataaa acaggtetta etgtttetaa
                                                                       60
gccagaactg attagccgtc tggagcaaag acaggagccc tggaatgtga agagacatga
                                                                      120
gaccatagcc aaacccccag gtaggttgga tgaatgaaac acatgccaca ggtgaaagct
                                                                      180
ccaaaggcca agaaggaaga cagacttcaa gagttatttg agaagctctg ctccaatgga
                                                                      240
gatgattttt gaggaacgtg attgtttatt cttgctcttg tacagaggca tcttctgtct
                                                                      300
aatgctccta aattctctaa aaagtaacct tactttgagg ttatagtgag agccaaagtc
                                                                      360
ctcttcatgg cttataagag actttattat ctgactgccc tttcattqtc ttqqggcaca
                                                                      420
cagaaatata tgtgtatttt tgaggaactc tatgttaa
                                                                      458
```

```
<210> 5220
<211> 689
```

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(436)
<223> similar to gi4406663 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5220 60 gggctatacc ccaggtgaat caattcagat atttgctgag attgagaact gctcttcccg aatggtggtg ccaaaggcag ccatttacca aacacaggcc ttctatgcca aagggaaaat 120 gaaggaagta aaacagettg tggetaaett gegtggggaa teettateat etggaaagae 180 agagacgtgg aatggcaagt tgctgaaaat tccaccagtt tctccctcta tcctcgactg 240 taqtataatc cqcqtqqaat attcactaat gqtatatqtg gatattcctq qagctatqga 300 tttatttett aatttgeeae ttgteategg taccatteet etacateeat ttggtageag 360 aacctcaagt gtaagcagtc agtgtagcat gaatatgaac tggctcagtt tatcacttcc 420 tgaaagacct gaaggtaatt tgataataca cgtctaagct taatctctta ctactattat 480 caagaaaatt attttgcctc tgatatttta tgaccctaga tgaacataat cttttcctaa. 540 agaaagtaga tgtgccccta atattcagtt ttgattatat gtcttcatag tttcgatcac 600. caaacaataa ttattttacc ttgacgttgc tttttaatac ctactattct gtgtattttg 660 acatgcataa gaacatgctg ttcgaattg 689

```
<210> 5221
<211> 2948
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2908)...(2246)
<223> similar to gi5457690 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5221
tttttttttt ttgtgaaaat tttatttttc tttttattgc aaatttctgg taaaggaaag
                                                                       60
aacatggaag ctgattctca tttgagcttt ggtgagaaga gaactgcact gtggctcgac
                                                                      120
ageteaceae eteggetgea cacceaaaea egeggaggee tegggeaege aetgatgeet
                                                                      180
gegacecace teccagaggt tetgacttaa teggtetggg aggeacageg gggeateagt
                                                                      240
agattteeca actectetgg atgattteaa catgtageca aggtgageae acetgeggtg
                                                                      300
geteatetea aggggetgge aatgteagaa geacetgaga ageteagetg acageeaagt
                                                                     360
gtcacctgct tacatcactc cttggccaga gtccagctgg tgttccccgc ctccctcttc
                                                                      420
ccaggtgtcg atgttctgat tccttctcct caaagacccc acaagacaga gatgctggag
                                                                      480
ggggtgtgge tteetgtget gtggtttgtg ettaaacgtg gagaaccaca tgaaccacgt
                                                                      540
gtacgctacc acaaaagaaa ttcactttct gattgcaaaa cagcattcgc ctctttttat
                                                                     600
ttgttaagtg gaaacttgtg gcaaaataag aaaacatgtg ttggataata tagtccctat
                                                                      660
ataacctctc atgtccaaat ttgaaaaaaa aaattgtcaa gccattgaca gcaaaatatg
                                                                      720
```

```
tactttagca gcatatttta tatgggtaaa cagtaatagc cagttagaca cttcatttgt
                                                                      780
gatttgtcct aaaaatagaa aatgettttt atttteetga gteettggea aacaaaaaae
                                                                      840
attititiet tittaatigt taaagtieet gittitetit tieetgggae acceteacag
                                                                      900
ttcagaacgt tgtgtctcac tgtcagtttt tacatacaga gatgaacaaa cagcactggg
                                                                      960
gccaattttc aatgactgat caaatatggc gattgaaaat aaaacaccca tcatctacaa
                                                                     1020
agttgctcaa gatgaaagtt tcttacagtg ctataaatgc aatatcaatt tgaattgttg
                                                                     1080
tocatacaaa agtatgaatt totattocat tagtaatact gaatgattaa tacottaaca
                                                                     1140
gcgataaaat ttttagaaca tttaaaaaaat acagaggatt ccagttttac atcatacttc
                                                                     1200
tgacggatta tcatactttc tattttgtct gcaaaacttt tacagagtac agtgcattga
                                                                     1260
catgataaaa ccaaggcaca aaaatacagt tacgataagt gtatataaac cctagcactt
                                                                     1320
tgtgccaatt ttggaaacag atcataaagt ctgaaaaatt accacattct atttgattag
                                                                     1380
tgaacaatta attgtgcagt aaatagactg ttaaccacca ttccattatt aaatatatgg
                                                                     1440
ctatcactat acaggitgig gataattcaa aaatagitti aaatattaaa accigtaata
                                                                     1500
tctaggtggt caacgcagat attgagcctt acgttatcta aataagtttc catttaattt
                                                                     1560
gcaatccaca tggcagttag caatttttaa actatttcca ttacataaat ggtgggttt
                                                                     1620
attotaaatg ttaaatoott toocottaca aaagacagaa gatttacaag aagataacca
                                                                     1680
atataagaag tgcatagaca acgataataa aatccaaatt ggactcaaag gttgaagtct
                                                                     1740
aatctactgg gacattctct taatttaggg tgaggagcaa cacattcctg tgatgattca
                                                                     1800
ttagtttett aattaaaaaa aaateeeeat gaeattttte aaaatagtaa acagtettea
                                                                     1860
ttagtgcatc aagcattgaa gaaaaattgt cgtctttcca ttcgtaaaat gaagaagata
                                                                     1920
aaagcettte aaaatecagg gegggggatt tecattgaat ttagagaagt gaaataaact
                                                                     1980
ggtaaaaact gtatttcata ettttaacaa aagagtattt teaagaetea aggtaaacat
                                                                     2040
ttagacccat aaaaacacat ttcttggcac atgcacgcca tggatggaac aatcctgaat
                                                                     2100
gcagcgatgg cctggctaca gaggtatccg gctcctagcc ccactggcaa aactgtcttt
                                                                     2160
taggacettg teccagetee etteacatgg gggtetetgg ettetgeate agetggattt
                                                                     2220
gettetgtag etggteeetg teeagettea tettggeete gagaaettge etgagggate
                                                                     2280
ctatgettte atagacgget gtaaacccag cattaactte tgettteatt teettgatgt
                                                                     2340
totggttoat otgtaactoo agottggtga ttogooogtg catottotoo tottottgoo
                                                                     2400
ttgttetetg accateaaaa gtettetttt gaedetette tattttgtea ageetggetg
                                                                     2460
acatetgget gagettette tecatatece titeaetgge tecaetgttt teettaaeaa
                                                                     2520
tcaaggaaag cigatcaatt ttcigtaaaa gcictititc tatccgiict igitccigii
                                                                     2580
gcaaccaact ccgtgcagat aatatctggt tactgagttc ctcaactgta cctttaaatt
                                                                     2640
tagtgtccaa aagctgaagc tggtggttac tgtctctgtg agacatcttc agtttggtgc
                                                                     2700
totgototga tattgacaag tocactotgt toaaaagotg agaaatotgt coototgoat
                                                                     2760
ctttgatttt cgtttccaag ataagtttgg cagcctgctg ttctttgttc aagtgctgga
                                                                     2820
geceeteata ggtegttttg tgetetgeag aaagactage tatgetggea teacatetgt
                                                                     2880
ccagacaaag aacaaagett gccactette etegaagate teecacaceg gagagetgge
                                                                     2940
gcatctcc
                                                                     2948
```

```
<210> 5222
<211> 1414
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1231)...(306)
<223> similar to gi3873707 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5222
ccataggcag ggtaggcatg cagcagggag ccggaatcca atccctcgcc attaatttaa
                                                                       60
cttagatgag ctactcctgg tccctggagc cactccccag gaaggatcct gtgaagacac
                                                                      120
atctggctct cgtgcccatg ctcctgccac tttgcccaac caacgaagtt agcaaatagt
                                                                      180
aaagtgttca tcattaccta gttttgtatt ataaaatgga atcaggaaca taaataggaa
                                                                      240
caaqtaqcaa aaccccaqcc ctgcgtagga ccattatcct ctcagccacc tctgcgtagg
                                                                      300
ccaatgagtt tggaaagttt ctcacagttt tcaagtttca gcgactctgc tttctgtttc
                                                                      360
                                                                      420
aatcgttcat ctctgtataa tcctgccaaa tttgtcagct ctgacttttg ttgtttctcc
ttccaacaac tagtctggat ataatcaatg taatccttct ctattgtttt ctccaagtca
                                                                      480
tgcagagaag etectetgta ggeettgtea aagtttttat eeacaaagta aggeaeetge
                                                                      540
aggttetgag tttetetaga aatggtgtag cecaaggteg atttatagaa cagactatat
                                                                      600
gggggattag tagccagcag ctgagtaatg acagatataa tcacaatcac aagaactgga
                                                                      660
agtagetgaa taaatgeaga atatgtagte tgaggtttet ettetteete eteettetga
                                                                      720
                                                                      780
gtctgtgtcc tctcatgtcg gtgccgtcga cggtaatagt aagtgtcatc tgtcacattt
gaaaacatat gaatatttcc tgtaggaaaa tgtcctccaa agaagacgtt gaacagctct
                                                                      840
totggagtga tgtcagcttc aaaatccctg taataattat aaggtctggc tcgaggggca
                                                                      900
gtgaaagtca cctgttcatc tccgtattca tcatagcgaa gtctcttatc aggattgctc
                                                                      960
aggactgcaa atgcatttcc tattgctttg aaagcatctg ttgctccagg agcacagttc
                                                                     1020
ttgtcagggt gaaatttcag ggcgagtttt ctgtaagctt tcttaagctc ttcgtcacta
                                                                     1080
gcatctcgag aaactcccag aatttcatag taatttctgc atttcttgat cctttgtacc
                                                                     1140
ccaagcaget gtteeteact gtaegtggag tteeceteac cetgeegggt etgagteeac
                                                                     1200
teatteteag aettetttte ettttgtgee tteatgeagt tacageagee acaggggtea
                                                                     1260
tgactetcag gaggtgtgte ttetgggtat ttgtttette taactgegte aatgtaaget
                                                                     1320
teegtecage geteeeeget geecagagte geegecatat eggtteeeaa teageaggte
                                                                     1380
egeegageet eeceegegee egeecaegeg teeg
                                                                     1414
```

```
<210> 5223
<211> 206

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (23)...(151)
<223> similar to gi190482 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5223
cagtttgtta aagggggatt ttggccccc ccccaaaaac cccaaaagtt tttttggggg 60
tttaaaaagg gggcccccc cgggccaagg ggggccaccc cggggtttcc cccctttgg
gggtttaaaa agggggccc cccatgggtt taagggtttc cacacccggt ccacggggtg
gtataccccc ttttttaaaa aaaaaa 206
```

```
<210> 5224
<211> 429
<212> DNA
```

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (2)...(200)
      <223> similar to gi5019774 in the genepept database release 114,
        Run with FASTXY 3.3t00, default parameters
      <400> 5224
gagagaccag gtggactgga gtagactgtt gagagacgct ggtctggtga agatgtccag
                                                                        60
gaaaccacga gcctccagcc cattgtccaa caaccaccca ccaacaccaa agaggcgagg
                                                                       120
aagtggaagg ttcccaagac aacccggaag ggaaaaggga cccatcaagg aagttccagg
                                                                       180
aacaaaaggc tctccctaaa agaccgccgc ttcaaaaaaa cctgaggaat ggagtgggcc
                                                                       240
aacactatcc agccactctg accagccgaa cgaggaactc aatcaaaatg agccatagcg
                                                                       300
ggaccacaag ggcaaggaga ccaccactt ctccagtctc tcttcggaca gccagtaatt
                                                                       360
cccgggcaag gccagagact tcaagtctat ctgaaaagtc tccagaggtc taaccccaga
                                                                       420
taaatagcc
                                                                       429
     <210> 5225
     <211> 2318
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(2319)
     <223> n = a,t,c or g^{\circ}
     <220>
     <221> misc feature
     <222> (4)...(1002)
     <223> similar to gi3929219 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5225
ccatctagcc catcaagcct ttctgctgcc agcagtcttg acaacttatc tgggagtttt
                                                                        60
tcagaactgt cttcagtagt tagttcaagt ggaacagagg gtgcttccag tttggagaaa
                                                                       120
aaggaggttc caggagtaga ttttagcata actcaattcg taaggaatct tggacttgag
                                                                       180
cacctaatgg atatatttga gagagaacag atcactttgg atgtattagt tgagatgggg
                                                                       240
cacaaggagc tgaaggagat tggaatcaat gcttatggac ataggcacaa actaattaaa
                                                                       300
ggagtcgaga gacttatctc cggacaacaa ggtcttaacc catatttaac tttgaacacc
                                                                       360
tetggtagtg gaacaattet tatagatetg teteetgatg ataaagagtt teagtetgtg
                                                                       420
gaggaagaga tgcaaagtac agttcgagag cacagagatg gaggtcatgc aggtggaatc
                                                                       480
ttcaacagat acaatattct caagattcag aaggtttgta acaagaaact atgggaaaga
                                                                       540
tacactcacc ggagaaaaga agtttctgaa gaaaaccaca accatgccaa tgaacgaatg
                                                                       600
ctatttcatg ggtctccttt tgtgaatgca attatccaca aaggctttga tgaaaggcat
                                                                       660
```

720

gcgtacatag gtggtatgtt tggagctggc atttattttg ctgaaaactc ttccaaaagc

```
aatcaatatg tatatggaat tggaggaggt actgggtgtc cagttcacaa agacagatct
                                                                      780
tgttacattt gccacaggca gctgctcttt tgccgggtaa ccttgggaaa gtctttcctg
                                                                      840
cagttcagtg caatgaaaat ggcacattct cctccaggtc atcactcagt cactggtagg
                                                                      900
                                                                      960
cccaqtqtaa atggcctagc attagctgaa tatgttattt acagaggaga acaggcttat
                                                                     1020
cctqaqtatt taattactta ccagattatg aggcctgaag gtatggtcga tggataaata
gttattttaa gaaactaatt ccactgaacc taaaatcatc aaagcagcca gtggccctct
                                                                     1080
acgttttact cctttgctga aaaaaaatca tcttgcccca caggcctgtg gccaaaagga
                                                                     1140
                                                                     1200
taaaaatgtg aaacgaagtt taaacattct gaccttgata aagcctttaa ataatgtacc
agtgttttcc taaatatttc cctgtttttt ccagcacttt aacagatgcc cattccccgg
                                                                     1260
                                                                     1320
ttaaactggg gttgtctgta cctaaattat aaacagagtt aacttggaac cttttatatg
                                                                     1380
ttatgcattg attcctaaca aactgtaatg ccctcaacag aactaatttt actaatacaa
tactgtgttc tttaaaacac agcatttaca ctgaatacaa tttcatttgt aaaactgtaa
                                                                     1440
ataagagett ttgtactage ceagtattta tttacattge tttgtaatat aaatetgttt
                                                                     1500
                                                                     1560
tagaactgca gcggtttaca aaattttttc atatgtattg ticatctata cttcatctta
categteatg attgagtgat etttacattt gattecagag getatgttea gttgttagtt
                                                                     1620
gggaaagatt gagttatcag atttaatttg ccgatgggag cctttatctg tcattagaaa
                                                                     1680
                                                                     1740
tetteteat ttaagaactt atgaatatge tgaagattta atttgtgata cetttgtatg
tatgaqacac attccaaaqa gctctaacta tgataggtcc tgattactaa agaaqcttct
                                                                     1800
ttactggcct caatttctag ctttcatgtt ggaaaatttt ctgcagtcct tctgtgaaaa
                                                                     1860
ttagagcaaa gtgctcctgt tttttagaga aactaaatct tgctgttgaa caattattgt
                                                                     1920
gttettttea tggaacataa gtaggatgtt acatttecag ggtgggaagg gtaateetaa
                                                                     1980
atcatttccc aatctattct aattacctta aatctaaagg ggaaaaaaaa aatcacaaac
                                                                     2040
aggactgggt agttttttat cctaagtata ttttttcctg ttctttttac ttggttttat
                                                                     2100
tgctgtattt atagccaatc tatacatcat gggtaaactt aacccaggaa ctataaaatg
                                                                     2160
taggttgtct cagtcccctc cagggcntcc ggatggggca agtgcagttg aaacagggtg
                                                                     2220
ettettgete eeggggttte tetneetgga tgttatggee eattgggaat tngeegteag
                                                                     2280-
tttgtgcacc attgggggac engggengtg etcagttt
                                                                     2318
```

```
<210> 5226
<211> 1464
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (332)...(677)
<223> similar to gi6010482 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5226
aaccetette tgttecaage actgtgtgag accetgeett ggataagtea aatgeatgag
                                                                       60
cttaggaaag tagagtaact gctacaaata ataaaaaaca gatacatctg cagtcaagac
                                                                      120
agtcaccacc gaagagtacc tggtgaaccc tgtgggcatg aaccgctaca gcgtggacac
                                                                      180
ctccgcctcc acctttaacc acaggggctc cttgcacccc tcctcctcgc tgtactgcaa
                                                                      240
gaggcagaac tetggagaca gecacettgg gggtggteet getgecaceg etggtggtee
                                                                      300
cegeactage eccatgtett etggtggeee eteggeacet gggetgagge etecageete
                                                                      360
cagccccaag agaaacacga cctctcttga aggaaacaga tgtgcctcaa gcccttctca
                                                                      420
ggatgcgcag gatgccaggc ggccacggag caggaacccc tccgcctgga ctgtggagga
                                                                      480
                                                                      540
cgtggtgtgg tttgtgaagg acgccgaccc acaggctctg gggcctcacg tggagctctt
cagaaagcac gagattgatg gcaacgctct gctgttgctg aagagtgaca tggtcatgaa
                                                                      600
```

```
gtacctgggc ctgaagctgg gacccgcact gaaactctgc taccacattg acaaactgaa
                                                                      660
gcaagccaag ttctgacgtt tttaaaaaaga cagaagcgaa acccaaaaca acagatccca
                                                                      720
                                                                      780
agattatett etgeettace aatateeege caacateaca aaatagaete teetettaaa
                                                                      840
attaacagec acagagaegt ggtettttta taaaaettgt gaatetttge ettttgaaga
                                                                      900
atttaacatg gaccttttcg agaggctcct ctgtgttcat aatttgccaa aaaattacaa
                                                                      960
aaqcctgtga tttttaacat ccctgttatg ctgatttctc ttaaagtggg tcctatttgc
ataacgagag agtggggaac tgaatgctta tgcccaagga gagttctgga gggttcaaag
                                                                     1020
gatgaaagaa ggacctttgt ccctgcggtc tctgcaggga cacccccctc aacaccatct
                                                                     1080
                                                                     1140
gcctctaact ctgacctggg gacctatccc tgtgagcctt gtttgcctca gctctggaag
                                                                     1200
ctgacttctg aagatgactg cctcaccttg cactgtctgg aaaacttgaa ttattttacg
ccgtgaaaga aaaaggaaaa aaaaaaaaat cttttctgtt cctaaaaaaat ctgaagaact
                                                                     1260
                                                                     1320
gggtttctcc gctagaggc aaactgctaa tgaaatttca ggaccctcac tgactgcagt
agcaggattg ttcagtactg agtggatggg ttagggtgtc tgtgaacaaa atctacccca
                                                                     1380
                                                                     1440
cacagaaaca ggggatttat tccacagtta gcaccacaga ttgcgacttg ggaagaaacc
atcagctàga ggggtctagt tcgt
                                                                     1464
```

```
<210> 5227
<211> 1306
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1164)...(722)
<223> similar to gi4468812 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5227
ttttttttt ttccaatgcc aaaaactggt gatttataga aattcaccct ggtttatttt
                                                                       60
tttcaaccaa aggaaaaaaa aaacatggtt caataattca gcatttggga ctctggcaag
                                                                      120
tactgtctgc attgttcaaa ataagtgttc ctggctgtga cgctctgcaa ccacatactg
                                                                      180
ategegeeca ggaacettet tecatggtte taataaaaca aaggacecae acatggageg
                                                                      240
ttacgtgagt caacaaaaga tgctctatca caatggtgcg taaaaagcaa gtctttgaaa
                                                                      300
aatatccaga tototaaago gaatacaaac actootattt gggttttgtt tttgttcatc
                                                                      360
ttcagtattt atattttagt tgttgaggaa aattttttt actgtaagga aggagttata
                                                                      420
tggactttat aaagtgggaa ccaacaggct gccggctaat acatacgctt tccctccaag
                                                                      480
tcaagtagct ttttcccccc gaaagcctct ttcatgattt tcattatggt tcagaaaagt
                                                                      540
aaagaaaatg atttcaagta ttcaattcct ataaaaattg gtatcaaaag taatagagga
                                                                      600
cctaatttct ttataattcc atgttttaaa aaataactta agaagcaaga ggtccggccc
                                                                      660
tttacttgta taaatacagc agcagaacta gagtttctta agacaacgtg gagaagagtc
                                                                      720
tgtgtttagc acctcaatca tcgatcttaa cgttggaaac gtttctgaaa ctgatggaag
                                                                      780
agtettataa gaaggtgaaa taetttteaa gtteateeag ettttggega etttgetaaa
                                                                      840
ggcctctgaa ccaggggctg tcatagcttc aaagtcgact aacttccctt tgggaatttt
                                                                      900
tectgetact tettttecae ttgecateag tgeteceaeg atgacegagt aageaattae
                                                                      960
actggatcct cgagagagtg gcattaaatt ataaaagtaa taaactaagg ataagattaa
                                                                     1020
gttgcagaca gcatcagcct ccccaaattc tgatgaaaga atcaatactt ttccttttgc
                                                                     1080
tgtcaaatct ttataaagtg catctatttc agcatgatat aattgtgtcc tttcttccgt
                                                                     1140
ggtttgagtt tccacagaaa ataatatatt gccaactttg tctcctgtaa tcgtgattgt
                                                                     1200
gaatccatca tattccttcc cttggtcttt aaggctggga acttttgtgt tcacggtgaa
                                                                     1260
cccatccttc gttttagtat taaactgctt cataatcgga agaagg
                                                                     1306
```

```
<210> 5228
<211> 4260
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2458)

<223> similar to gi4240241 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5228 geoggettea ateaegggtt caactgegea gaatetacea aettegeeáe eetgeggtgg 60 attgactacg gcaaagtggc cactcagtgc acgtgccgga aggacatggt caagatctcc 120 atggacgtgt tegtgegeat eetgeageee gagegetaeg agetgtggaa geagggeaag 180 gaceteacgg tgetggacea caegeggeee aeggegetea ceageeeega getgagetee 240 tggagtgcgt cccgggcctc gctgaaggcc aagctcctcc gcaggtctca ccggaaacgg 300 360 agecageeca agaageegaa geeegaagae eecaagttee etggggaggg taeggetggg gcagcgctcc tagaggaggc tgggggcagc gtgaaggagg aggctgggcc ggaggttgac 420 cccgaggagg aggaggagga gccgcagcca ctgccacacg gccgggaggc cgagggcgca 480 gaagaggacg ggaggggcaa gctgcggcca accaaggcca agagcgagcg gaagaagaag 540 agetteggee tgetgeeece acagetgeeg ecceegeetg etcaetteec etcagaggag 600 gegetgtgge tgecatecee actggagece eeggtgetgg geecaggeee tgeagecatg 660 gaggagagec cectgeegge accepttaat gtegtgeece etgaggtgee cagtgaggag 720 ctagaggcca agcctcggcc catcatcccc atgctgtacg tggtgccgcg gccgggcaag 780 gcagcettca accaggagca cgtgtcctgc cagcaggcct ttgagcactt tgcccagaag 840 ggtccgacct ggaaggaacc agtttccccc atggagctga cggggccaga ggacggtgca 900 gccagcagtg gggcaggtcg catggagacc aaagcccggg ccggagaggg gcaggcaccg 960 tecacatttt ecaaattgaa gatggagate aagaagagee ggegeeatee eetgggeegg 1020 eegeceaece ggteeeeact gteggtggtg aageaggagg ceteaagtga egaggaggea 1080 teceetttet eeggggagga agatgtgagt gaeeeggaeg eettgaggee getgetgtet 1140 ctgcagtgga agaacagggc ggccagcttc caggccgaga ggaagttcaa cgcagcggct 1200 gegegeaegg agecetaetg egecatetge aegetettet acceetaetg eeaggeeeta 1260 cagactgaga aggaggcacc catagcctcc ctcggagagg gctgcccggc cacattaccc 1320 tecaaaagee gteagaagae eegacegete atecetgaga tgtgetteae etetggeggt 1380 gagaacacgg agccgctgcc tgccaactcc tacatcggcg acgacgggac cagcccctg 1440 ategeetgeg geaagtgetg cetgeaggte catgecagtt getatggeat eegteeegag 1500 etggteaatg aaggetggae gtgtteeegg tgegeggeee aegeetggae tgeggagtge 1560 tgcctgtgca acctgcgagg aggtgcgctg cagatgacca ccgataggag gtggatccac 1620 gtgatetgtg ceategeagt eccegaggeg egetteetga aegtgattga gegeeaceet 1680 gtggacatca gcgccatccc cgagcagcgg tggaagctga aatgcgtgta ctgccggaag 1740 cggatgaaga aggtgtcagg tgcctgtatc cagtgctcct acgagcactg ctccacgtcc 1800 ttccacgtga cctgcgccca cgccgcaggc gtgctcatgg agccggacga ctggccctat 1860 gtggteteca teacetgeet caageacaag teggggggte aegetgteca aeteetgagg 1920 gccgtgtccc taggccaggt ggtcatcacc aagaaccgca acgggctgta ctaccgctgt 1980 egegteateg gtgeegeete geagacetge taegaagtga aettegaega tggeteetae 2040 agegacaace tgtaccetga gageateacg agtagggaet gtgtecaget gggacecect 2100 teegaggggg agetggtgga geteeggtgg aetgaeggea aeetetacaa ggeeaagtte 2160 atctcctccg tcaccagcca catctaccag gtggagtttg aggacgggtc ccagctgacg 2220

```
gtgaagcgtg gggacatett caccetggag gaggagetge ecaagagggt eegetetegg
                                                                   2280
ctgtcactga gcacggggc accgcaggag cccgccttct cgggggagga ggccaaggcc
                                                                   2340
                                                                   2400
gccaagegec egegtgtggg caceeegett gccaeggagg acteegggeg gagecaggae
                                                                   2460
tacgtggcct tcgtggagag cctcctgcag gtgcagggcc ggcccggagc ccccttctag
                                                                   2520
gacagetgge egeteaggeg acceteagee eggeggggag gecatggeat geecegggeg
ttegettget gtgaatteet gteetegtgt eeeegaceee egagagggee aceteeaage
                                                                   2580
egegggtgee cectagggeg acaggagece agegggaege egeaegegge eccagaetea
                                                                   2640
                                                                   2700
gggagcaggg ccaggcgggc tcgggggccg gccaggggag caccccactc aactactcag
aattttaaac catgtaagct ctcttcttct cgaaaaggtg ctactgcaat gccctactga
                                                                   2760
gcaacctttg agattgtcac ttctgtacat aaaccacctt tgtgaggctc tttctataaa
                                                                   2820
                                                                   2880
tacatattgt ttaaaaaaaa gcaagaaaaa aaggaaaaca aaggaaaata tccccaaagt
2940
gaaccaggat tetetgagag gtcagagcat etegetgttt ttttgttgtt gttttaaaat
                                                                   3000
attatgattt ggctacagac caggcaggga aagagacccg gtaattggag ggtgagcctc
                                                                   3060
gggggggagg ggcaggacgc cocggtttcg gcacagcccg gtcactcacg gcctcgctct
                                                                   3120
egecteacce eggeteetgg getttgatgg tetggtgeca gtgeetgtge eeactetgtg
                                                                   3180
cctgctggga ggaggcccag gctctctggt ggccgcccct gtgcacctgg ccaggggaag
                                                                   3240
cccgggggtc tggggcctcc ctccgtctgc gcccaccttt gcagaataaa ctctctcctg
                                                                   3300
gggtttgtct atctttgttt ctctcacctg agagaaacgc aggtgttcca gaggcttcct
                                                                   3360
tgcagacaaa gcacccctgc acctcctatg gctcaggatg agggaggccc ccaggccctt
                                                                   3420
etggttggta gtgagtgtgg acagetteee agetettegg gtacaaceet gageaggteg
                                                                   3480
ggggacacag ggccgaggca ggccttcggg gcccctttcg cctgcttccg ggcagggacg
                                                                   3540
aggeotygig teetegetee acceaeceae getgetgtea eetgagggga atetgettet
                                                                   3600
taggagtggg ttgagctgat agagaaaaaa cggccttcag cccaggctgg gaagcgcctt
                                                                   3660
ctccaggtgc ctctccctca ccagctctgc acccctctgg ggagccttcc ccaccttagc
                                                                   3720
tgtctcctgc cccagggagg gatggaggag ataatttgct tatattaaaa acaaaaaatg
                                                                   3780
gctgaggcag gagtttggga ccagcctggg ctatatagca agaccccatc actacaaatt
                                                                   3840
ttttacaaat tagctaggtg tggtggtgcg cacctgtggt cccagctact cgggaggctg
                                                                   3900
tggtgggagg attgcttgag tccaggaggt tgaggctgca gtcagctcag attgcaccac
                                                                   3960
tgcactccag cctgggcaac agagcgagac cctgtctcca aaaaaaaaa aaagccaggg
                                                                   4020
tttattttaa aaagggggc tcaaacgccc ccgggcttgg ggggccctgg ggaaccccag
                                                                   4080
agggggtccc ccaggaccaa cccttttttt ttttttgggg ggggggggg gggcctgccg
                                                                   4140
tacaaggagc tggccaggat aaggcaggag gatcacataa aataaggggg tcgaggttta
                                                                   4200
agegagaaac caatgeeegg agggeeetee aaacettggt ttacteaagt ggeeaceteg
                                                                   4260
```

```
<210> 5229
<211> 1211
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3) . . . (1085)
<223> similar to gi402647 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5229
aggaatgggt ccctgccaac accgagcccg tggagcgctg tggcttcacc gtcaagaatc 60
tcccgaccgg agccagaatc ctcttccgag tagttgggt caacatcgcg gggcgcagcg 120
agccggccac cctggcccag ccggtcacca tcagggagat tgcggagcca cccaagatcc 180
```

```
ggetteeceg ceateteege cagacetaca teegeaaagt gggegageag eteaacettg
                                                                      240
tegteceett ceagggaaag eeeeggeeee aggtggtgtg gaccaaggge ggggeeeege
                                                                      300
tggacacete cegegtgeae gtgeggacea gegaettega cacegtgtte ttegtgegee
                                                                      360
aggeggeeeg eteegaetee ggggagtaeg agetgagegt geagategag aacatgaagg
                                                                      420
acaccgccac catccgcatc cgcgttgtgg aaaaggctgg gccccccata aacgtgatgg
                                                                      480
tgaaggaggt gtggggcacg aacgcgctgg tggagtggca ggcccccaaa gatgatggga
                                                                      540
acagtgagat catggggtat ttcgtccaga aagcagacaa aaaaaccatg gagtggttca
                                                                      600
acgtctatga acgtaacagg cacactagct gtactgtgtc cgaccttatc gtgggcaatg
                                                                      660
aatactattt cegagtttac acegagaaca tetgtggget cagtgaetea eetggtgtet
                                                                      720
ccaagaacac ggcccgcatc ctcaagacag gaatcacctt caaaccgttc gagtataagg
                                                                      780
agcatgaett ceggatgget cecaagttee tgacaectet catagaeege gtggtegtgg
                                                                      840
ctgggtactc ggcagccctc aactgtgctg tcagaggcca cccgaagccg aaggtggtct
                                                                      900
ggatgaagaa caagatggaa atccgtgaag atcccaagtt cctgataacc aattaccaag
                                                                      960
gagteetgae getgaacate egtegeeeet egeeettega egetgggaet tacacetgee
                                                                     1020
gggccgtcaa cgagctgggc gaggcgctgg ctgagtgcaa gctggaggtc cgagtgccgc
                                                                     1080
agtgagacct gtcccctacc tgccaagaca attggtggtg gagtcctgac cccaatcccc
                                                                     1140
aacctcccag gactgtgttc tttctggagt tttcgctgag aacaaaacag tgttgtctgg
                                                                     1200
aaaaaaaaa a
                                                                     1211
```

```
<210> 5230
<211> 2018
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(527)
<223> similar to gil842216 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5230
gaacgctcaa gtcgaccatc cgtatcaagc acagcgggaa tgacttcaag tgtcctcatt
                                                                       60
gegeetteet gggtgaeage aaageeaeee teeggaagea eageegegtg caceagtegg
                                                                      120
agcategtga gaagtgeteg gaatgeaget acteetgete eageaaggee geettgegea
                                                                      180
tecaegageg tatecaetge acegteegee ettteaagtg caactaetge agettegaet
                                                                      240
ccaaacagcc cagcaacctg agcaagcaca tgaagaagtt ccacggggac atggttaaga
                                                                      300
ctgaggetet agagaggaag gacaeeggea ggeagageag eeggeaggtg geeaagetgg
                                                                      360
atgccaagaa gagtttccac tgcgatatat gcgatgcctc cttcatgcgg gaggactcgc
                                                                      420
teegeageea caagagaeag caeagtgagt acaatgagag taagaaeteg gaegtgaeeg
                                                                      480
ttctccagtt tcagatcgac cccagcaagc agcccgccac gcccctcact gtgggacacc
                                                                      540
tecaggiges cetecagees agecaagige eccagiteag egagggaaga gicaaaatea
                                                                      600
tegttgggca teaggtgeec caggegaaca ceategteea ggetgeegee getgeagtga
                                                                      660
acategicee geeigeeitg giggeeeaga acceagagga acteeeaggg aacageegge
                                                                      720
tgcagatect gegecaggte agtetgateg ecceectea gteetegegg tgteegageg
                                                                      780
aggegggege aatgaeeeag eeggetgtee tgetgaeeae eeaegageag aeggaeggag
                                                                      840
ccactetgea ccagaetete atecceaegg ceteaggtgg ecceeaggaa ggetetggea
                                                                      900
atcaaacttt cattaccagt tcgggtatta cttgcactga ctttgaaggc ctaaacgcct
                                                                      960
tgattcagga ggggacagca gaagtgacag tggtgagcga tggaggccag aacatcgcag
                                                                     1020
tggccaccac agegecaceg gtetteteet eetetteeca geaagaacta eecaageaga
                                                                     1080
cctactccat cattcaaggg gcagcccatc cagctttgct ctgtcccgcc gactccattc
                                                                     1140
```

```
cagattagtg cttaaaaaaa caaaaggagt gggggaaagg aattgagaaa aagaaatctt
                                                                1200
1260
acggagtete getetgttte ccaggetgga gtgcagtgge getatettgg etcaetgcaa
                                                                1320
                                                                1380
egteegeete ceaggiteaa gegattetea tgeeteagee eteegagtag etgggaceae
aggtgtacga catcatgact ggctaatttt tgtatattta gtagagacgg ggtttcatca
                                                                1440
                                                                1500
tgttgaactc ctgacctcaa gtgatctgcc cacctcagcc tcccaaagtg ctgggattac
aggtgtgage caccatgect ggccgtggtt tgctcttaat gtttttaagg atggttgtga
                                                                1560
atcccctgg ccccataata aattgtaatt ttatactgct tactataatt tttttaacac'
                                                                1620
tgtaacaact ttgagaccac ctctgaatcg tcgcattata actgttgtag aatcttaaat
                                                                1680
gttaccaaga tgattccaat gaggggttgg aattaaatgc attaagtagt gaattcatgt
                                                                1740
gtttgtttcc aacttgattt tccaactcta ataaaggttt ctgtccatct tattacattt
                                                                1800
gtgtagtaaa tggtacttcc cagcctctct tttgccccat tctggaatac tccccagagt
                                                                1860
ttgggggtgt tcatgtttta tacatgtaag tctgttggca tgaaggacca ttttctacat
                                                                1920
aatatgacat ggatacttga cccaaaaaaa aatgtttagt gctaatgagc agaaaatgaa
                                                                1980
tggttccata ataaattgat atctgattaa aaaaaaaa
                                                                2018
```

```
<210> 5231
<211> 2159
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (14)...(1177)
<223> similar to gil63538 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5231
aaccacgcgt ccgctcacct ccaagattct cttccgggat ttggtccttg ccgtgcgcga
                                                                       60
ccatgccttc acggggtccc cttaccctgt catcggatcc ctggagaacc actgcgggct
                                                                      120
ggagcagcag gctgccatgg cccgccacct ctgcaccatc ctgggggaca tgctggtgac
                                                                      180
acaggegetg gaeteeceaa ateeegagga getgeeatee eeagageage tgaagggeeg
                                                                      240
ggtcctggtg aagggaaaga agctgcccgc tgctcggagc gaggatggcc gggctctgtc
                                                                      300
ggatcgggag gaggaggagg aggatgacga ggaggaagaa gaggaggtgg aggctgcagc
                                                                      360
gcagaggcgg ctggccaagc agateteece ggagetgteg geeetggetg tgtactgeca
                                                                      420
egecaceege etgeggacee tgeaceetge ecceaaegee ecaeaaecet gecaggteag
                                                                      480
ctccctcagc gagcgcaaag ccaagaaact cattcgggag gcagggaaca gctttgtcag
                                                                      540
gcacaatgcc cgccagctga cccgcgtgta cccgctgggg ctgcggatga actcagccaa
                                                                      600
ctacagtccc caggagatgt ggaactcggg ctgtcagctg gtggccttga acttccagac
                                                                      660
gccaggctac gagatggacc tcaatgccgg gcgcttccta gtcaatgggc agtgtggcta
                                                                      720
cgtcctaaaa cctgcctgcc tgcggcaacc tgactcgacc tttgaccccg agtacccagg
                                                                      780
accteccaga accaetetea geatecaggt getgaetgea cageagetge ceaagetgaa
                                                                      840
tgccgagaag ccacactcca ttgtggaccc cctggtgcgc attgâgatcc atggggtgcc
                                                                      900
egeagactgt geeeggeagg agactgacta egtgeteaac aatggettea acceeegetg
                                                                      960
ggggcagacc ctgcagttcc agctgcgggc tccggagctg gcactggtcc ggtttgtggt
                                                                     1020
ggaagattat gacgccacct cccccaatga ctttgtgggc cagtttacac tgcctcttag
                                                                     1080
cagcctaaag caagggtacc gccacataca cctgctttcc aaggacgggg cctcactgtc
                                                                     1140
accagecacg etetteatee aaateegeat ceagegetee tgagggeeca eeteactege
                                                                     1200
cttggggttc tgcgagtgcc agtccacatc ccctgcagag ccctctcctc ctctggagtc
                                                                     1260
aggtggtggg agtaccagcc ccccagccca cccacttggc ccactcagcc cattcaccag
                                                                     1320
```

```
gcqctqqtct cacctgggtg ctgagggctg cctgggcccc tcctgaagaa cagaaaggtg
                                                                     1380
ttcatgtgac ttcagtgagc tccaaccctg gggccctgag atggccccag ctcctcttgt
                                                                     1440
cctcagccca cccctcattg tgacttatga ggagcaagcc tgttgctgcc aggagacttg
                                                                     1500
                                                                     1560
gggagcagga cacttgtggg ccctcagttc ccctctgtcc tcccgtgggc catcccagcc
teetteece agaggagege agteacteea ettggeeceg acceegaget tageceetaa
                                                                     1620
geoeteettt accceaggee tteetggaet ceteceteea geteeggaac etgageteee
                                                                     1680
cttcccttct caaagcaaga agggagcgct gaggcatgaa gccctgggga aactggcagt
                                                                     1740
aggttttggt ttttattttt tgagacaggg tctcgctcca tcgcccaggc tggagtgcaa
                                                                     1800
tgttgcaatc atggctcact gcagctttga actcccaggc tcaagcgatc ctcccatctc
                                                                     1860
                                                                     1920
agéeteetga gtagetggga etacaggeae aggecaceaa acetggetaa tgtttaaatt
ttatgtaaag atggeggggg gggegggggt etecetatgt tgeecagget ggtetegage
                                                                     1980
tectgacete aagtgateet eetgeeecag catteeaaag tgetgggatt acaggtgtga
                                                                     2040
gccactgcct ggcctggccg taggtttgta actgtttcat agaagagccc tggagaagac
                                                                     2100
agtagaatga gootatotag titaaaaaat aaagaagcao gitgatitoa aaaaaaaaa
                                                                     2159
```

```
<210> 5232
<211> 1148
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (478)...(594)
<223> similar to gi4102711 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5232
agtcatgcga tgaccatgat tacgtctagc ctggccgcag gcctagcacg cacctattgc
                                                                       60
tgacaccctg agtttaattt tgttacccgc cgtgcggcac acgtgggata aaagctgaag
                                                                      120
gaggactgta acaacactga caacaagaa cggaagtcct tccagaagga gcttgggatg
                                                                      180
gccctactga agatggactg ccagggcctg gtggtcagac tcatccagga ctttgtgctc
                                                                      240
ctgaccacgg ctgtagaggt ggcccagcgc tggcgggagc tggctgagaa gctggccaag
                                                                      300
gtotocaago agcagatgga ogcotacgag totococaco gggacaggaa oggggttgtg
                                                                      360
gacagegagg ccatgtggaa gcctgcgtat gacttcttac tcacctggag ccatcagatc
                                                                      420
ggggacaget accgggatgt catccaggag ctgcacctgg gcctggacaa gatgaaaaac
                                                                      480
cccatcacca agegetggaa geaceteact gggaetetga tettggtgaa etecetggae
                                                                      540
gttctgagag cagccgcctt cagccctgcg gaccaggacg acttcgtgat ttgaatgggt -
                                                                      600
cocctccct cotgetgete tggagtgcaa gecetettet gecetgegtg coetgetgte
                                                                      660
accgcggagc tgaagaggga ggaaggggcg gctgctcaga cagatttagg gcccgccagc
                                                                      720
taggetacae ceateatgeg cegeceteet ceategaggg agaggeetga agggaetgee
                                                                      780
tactgcagct cgttgccaat cacatagctt tctatttgtt aagtataaat ttaaatttaa
                                                                      840
aatcactttt ttaacgaatg gggggaaggg atctatgaga aaggtggtat ctaatttttt
                                                                      900
tatggaccat aaaggtttaa aagaaaatag gggcacaggg tgttgaggtt tttatgttgt
                                                                      960
tatagacctt tttaaattat gttagagatg tatataggta tttaaaggtc actgggagca
                                                                     1020
tttctgattc ccgggccaca cttttgcatt tcaacactca agcccgggaa aagatqctcq
                                                                     1080
ttcggatgtt gtacctcttt cactccctgc gagtagcact gtgaatgacg tattaaaaag
                                                                     1140
tggctttt
                                                                     1148
```

```
<210> 5233
<211> 3675
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3676)...(2035)
<223> similar to gi4101480 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5233 ccatcatgga gcacctgcgg gaattcctgt taacaggccg tgaggacctt cagcctgtgc 60 agatecagag cetggagaca etgggggtge tggcaegage agtgggggag cecatgagge 120 egetggetga ggaatgetge cagetgggte tgggeetetg egaccaggta gacgaegetg 180 acttgcggcg ctgcacgtac agcctatttg cagccttatc gggtctgatg ggtgagggcc 240 tggcgcccca cttggaacag atcaccacgc tcatgctgct gtcactgcgt tccaccgagg 300 gcattgtgcc tcagtatgac gggagcagct ccttccttct gtttgacgat gagagtgatg 360 gggaagaaga ggaggagete atggatgagg atgtggaaga agaggatgae teagagatet 420 cagggtacag cgtggagaat gccttcttcg atgagaagga agacacctgt gctgccgtgg 480 gggagatete tgtgaacace agtgtggeet teetteeata catggaaagt gtetttgaag 540 aagtatttaa actgctggag tgccctcacc tgaatgtgcg gaaggcagcc catgaggctc 600 tgggtcagtt ttgctgtgca ctgcacaagg cctgtcaaag ctgcccctcg gaacccaaca 660 etgetgettt geaggetgee etggeeegag tegtgeeate etacatgeag geagtgaaca 720 780 gggageggga aegecaggtg gtgatggeeg tgetggagge cetqacaqqq qtqeteegea gctgtgggac cctcacactg aagecccctg ggcgcctcgc tgagctctgt ggcgtgctca 840 aggctgtgct gcagaggaag acagcctgtc aggatactga cgaggaggag gaagaggaag 900 atgatgatca ggctgaatac gacgccatgt tgctggagca cgctggagag gccatccctg 960 ccctggcagc cgcggctggg ggagactcct ttgccccatt ctttgccggt ttcctgccat 1020 tattggtgtg caagacaaaa cagggctgca cagtggcaga gaagtccttt gcagtgggga 1080 cettggcaga gactattcag ggcctgggtg ctgcctcagc ccagtttgtg tctcggctgc 1140 tecetgtget gttgageace geceaagagg cagaceeega ggtgegaage aatgeeatet 1200 tegggatggg egtgetggea gageatgggg gecaceetge ceaggaacae tteeecaage 1260 tgctggggct cctttttccc ctcctggcgc gggagcgaca tgatcgtgtc cgtgacaaca 1320 tetgtgggge aettgeeege etgttgatgg ecagteeeae eaggaaacea gageeeeagg 1380 tgctggctgc cctactgcat gccctgccac tgaaggagga cttggaggag tgggtcacca 1440 ttgggcgcct cttcagcttc ctgtaccaga gcagccctga ccaggttata gatgtggctc 1500 cegagettet gegtatetge agecteatte tggetgacaa caagateeca ceagacacea 1560 aggccgcact gttgctgctc ctgacgttcc tggccaaaca gcacaccgac agctttcaag 1620 cagctctggg ctcactgcct gttgacaagg ctcaggagct ccaagctgta ctgggcctct 1680 cctagactgc aggctgcagc cagtccagag agaatagagc ctgcccaggc cttaaqacca 1740 cctctcagcc cagttcagtt ctgccttacc aaagattctg agactcatac ccatttggag 1800 ccagccccac ttgctgcctt acagggctgt ccctgaggct ggatctgtta caaatgagtc 1860 atgacatcat actgtaataa aagcagcttg ttttctgctt gaacaatagc tctgagagca 1920 agaaggetgg aaatgeacat teagaaatga ggtaageagg acceagtgag geaegaegtg 1980 gtttactaga agtggccggt ttcctggcag ctttgtaaat ggactctaac ctcagtggaa 2040 tetgggeece ggetggatea ggaggegace atatggettt tettgtttea egtgaagaat 2100 ctgttgcgct gagagcacca ggagcaggta gaagacccgg gcagccatcc tgcgggggct 2160 gagaggtgac accaggetge tgaagteggg etecetgtta geetgeaget eeagtgeeae 2220 tgccctgtgc actgcttcca gtgagagcag ctcgagctct gggggcagca ccaaaggcat 2280 ctccatgggc acctcaggga gttcaggcac cacgggcaat gcaggagctt ctggcgcctc 2340 cacctcaggc caggcccacc gttcttctgg tgggatgagg ctgatgcggg acttctcctc 2400

```
2460
ttcagctgcc tctagggaga tctctaaaga caccataagg ggaacactgg gctccagggc
ctccctcggg acctcaatct cacttggaac ttcaatcttt ctcctttcct cctcagcggc
                                                                     2520
tgcctcctca ggcagctctc gcctgagggc ttttggggggt ggctgggcac aatgggtcca
                                                                     2580
gagacccagt agttcagggg gtagccagcc agagagagtt ggggttctga acaactccgc
                                                                     2640
agggcetetg atggteetet egggeggetg caccatggga catteccage agtgggetet
                                                                     2700
ggtttgcagt tgttcctgga atttctccgg ggagatctga gtctccttgt cccagaacag
                                                                     2760
taaccggcga cgacggcggc ggcgaggagg tggggggact ggggggcctcc tctctgggct
                                                                     2820
gggtggggct ggcagacgca gctcctccgg gggggtcacc tccatgagta gggccccagg
                                                                     2880
ttcccagcet gtcagcetca getectcagg acceagtgee tetectatte ettecacete
                                                                     2940
tgcaggaget ggaggtggga geegegggat ttetaacaag atagettett etteetetge
                                                                     3000
gatcagcagg tecagttete ggeggetgae etetgggage tecegtteae eeteaatete
                                                                     3060
cagcatccgt atgggctctg cctccaggat cgtgatggcc tcaggtggca gcacagtgac
                                                                     3120
eggaateete tetggeteee tgggetetgt aggaaettea ggagggatet etteaaetet
                                                                     3180
ctctgggatt gcagcctcta agaggtgtcg aatctgaggg atatcgaaag gactaggaag
                                                                     3240
tetgggatee acagacatea teecaaaaaa gggatetgga geatetteta gggtetecat
                                                                     3300
catggccagg tggttaggaa gcagcaggct gggtagctca gtctccatat ctattcggat
                                                                     3360
ctgcagctgg gcacggtgga ggcgctccaa gatgtgctgg atgtcctcca cgaggtactg
                                                                     3420
gcattgttga gaatagacgc ggatcacacc gatctgaagt tgggctgaga gatagaggga
                                                                     3480
gaagegggge egeggeagge egggetgegg gggttgeact egtaceagea egtaattgag
                                                                     3540
gatttcctcg caggttttca ccacattcac cctcaggtat tcgcgcttca ccaaccggct
                                                                     3600 -
geogegagte geogecagee agatggtgge aaagcageeg gtgtggeget gaagcaegtt
                                                                     3660
gggatagtag aacat
                                                                     3675
```

```
<210> 5234
<211> 1747
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(416)
<223> similar to gi2739105 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5234
gegacegeca actggacgge gggetteage egtgggecea egeegeeege gettgtggge
                                                                       60
atcoggocog catggooggg cogoggogog cgccgcctcc togtgotgga agaattcaag
                                                                      120
acggagaaga ggctgtgcga gatgttctac gccgtcacgc tgctcttcct gctcctctgg
                                                                      180
gggccctacg tcgtggccag ctacctgcgg gtcctggtgc ggcccggcgc cgtcccccag
                                                                      240
gcctacctga cggcctccgt gtggctgacc ttcgcgcagg ccggcatcaa ccccgtcgtg
                                                                      300
tgcttcctct tcaacaggga gctgagggac tgcttcaggg cccagttccc ctgctgccag
                                                                      360
agcccccgga ccacccaggc gacccatccc tgcgacctga aaggcattgg tttatgaggg
                                                                      420
aggeceegee acatagaeee eeaaeeeage ettteeettt ggeteggaeg gtgaegttgt
                                                                      480
atetttteet tetggeeeet gtttaatttt etaagetgee tteaaaatga etegaagtgg
                                                                      540
acagacactt ggattgtact gactcctttg gggggggggt gggtgaggag taagatgctc
                                                                      600
ageceaetee ageteegeae attegteete etaaetegae tttetteetg acaataggee
                                                                      660
etgeagtett titgtagegg tactgaegte tittatteea tgtgtggtte ettititet
                                                                      720 .
ttttctataa aggctgtact aattttcttc atgcaacgtt tcctaaagac catggccagt
                                                                      780
tttctacaga agctattttt tgacaacctc aagtgggcat tacattttgc agtgaagtag
                                                                      840
agggaaccta gggggacttc ttcacaagtt agatttcttg aggatcttct gttggaagca
                                                                      900
```

```
ggagaaagtg gggggtgggg gaagttgtcc gaaatgccct ctgaattgcc ggctgcaggg
                                                                      960
teettgtget gegetggtte tttgaaagte teagtgttga tattgaaett aaagageaga
                                                                     1020
gatggagatc agtagcaagg cagtcatttt tttaaagcag taagtaacaa gtaagatttg
                                                                     1080
gttcccggtt tactttctgc tgctaaaaac cacgtcagtg acaactgctc tctgtattat
                                                                     1140
agcaatcttg aatggaaaca tttctgtcaa gttgtaagtt ttaaaagagt aaagtgtttt
                                                                     1200
ggttagtaat gatgtggaga aaaatacagt attgcatgtg ttcgtgtgta tagattgtgg
                                                                     1260
ttcgaggatt gggagggctc tgagaagcag agtactacat caaaattgtt ttaagtattt
                                                                     1320
tttgccaata aaaaattaat tttatggaaa tggcttgtgc tttgagaagc ccagttttat
                                                                     1380
totgtottat gaaactaatt tooactttga aaattgttot totgttgttt atggtataaa
                                                                     1440
tgaatggaat ataatgatat ceteetteta ggaaacaaag cattteetta aaatgtttge
                                                                     1500
taggttaagc tgtgctgttc tactgatggt tgttttaaat taataatgag aactataatt
                                                                     1560
taaataatat ttetttgtta gacattataa tgttaaactg aaagactaaa ttetgcaagt
                                                                     1620
actatataat atttttggct tataatgcta catttttatt aatgtacctt ccgttttgag
                                                                     1680
gatttatatc tgtatttctc tttgcattat acaaatatac cagtattttc attctggaaa
                                                                     1740
                                                                     1747
```

```
<210> 5235
<211> 856
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(201)
<223> similar to gi913894 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5235
agtgtataac agacaaacca tecaggteag tttaatgeag aatggetaec cagtgatete
                                                                       60
ggcctttgca ggagaccagg atgtcaccag agaagctgct agcaatggcg tgctgctgct
                                                                      120
catggaaagg gaagacaaag tgcatctcaa acttgagaga ggcaacctca tggggggctg
                                                                      180
gaaatactcc acattctcgg gcttcttggt gtttcctcta taaacacaga gccccctaga
                                                                      240
tggtggggga atggcaaact ggacccagga ctccgccctt taaaacaccc tgaacttact
                                                                      300
ggaattggac accttgtttc caacctccgt cagactgttg cagtagaaga atgatttcct
                                                                      360
ttgaaacete cagtaetttt gtttttgttt tttggaatae tgacaattee tegggaacet
                                                                      420
ggcctctaat tagttttaga tgacaaggtc ttaaggagaa atgaaattat cgatttgagc
                                                                      480
aatttgtacc tgtgattgta aagtcaatat cggattttat tgttgggacc atggacctct
                                                                      540
tttgtttgta tgttgtattg tcgtcccaac ggaaggagag ctcctgactc caggatgggc
                                                                      600
tgcaggttgc agtcagggct tgaagtagga gcccagcaaa gaaccacctg ctggacagtc
                                                                      660
ctttgacatg tgttctgtgt gtgtctgtat agccttaaga aaaagaatgg cttcactttc
                                                                      720
attetgtatt etteeecca ceatgtgget gggaggaett gggaggggga tggggaeatt
                                                                      780
ggggaacctg ttcaagaagt gctttattcc agaggaagca aatttttgca cgattgggac
                                                                      840
tgcaattttt gttttg
                                                                      856
```

```
<210> 5236 <211> 4451
```

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4452)...(148)
<223> similar to gi4589474 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

<400> 5236

ttttttttt ttgcgtttcc tcttcgtaag agaagcctga ggcagccagg gagagggtcc 60 ccaggcccct ggcagggaga gggtggcacc ctcctcccgg gccctcccag gaggggcagc 120 tggcagtggg gcgcagtgcc gggggctcag acataatact ccttgtcttt gttcttcttg 180 gccttgctgg gcgtcttggg ggcagccggg gccttctctt tcaccaccgc cccattgctc 240 tgggccgagt tactgatgta gtttcggctc tggtccacct ggtaggagcc ctcatcacga 300 ttgcggtact tatacatggc gtagaggagg atgaggatgc agagcgccgc cgccgccaca 360 atgeceacea ceatgecegt ggtgetgetg gaeteeegga teaceteeac tgegeeegge 420 gggccccgct ccccaggccc tgtggggttg gctgtgggca gatgggggaa gccgggggct 480 gaggtcacgc cggggcgcag gggaggggc ctccgcggct caaaggacgt gggggcccc 540 ggccccaagg gcgggttete cagcaagggc tgaagegggt eteggtggtt catttttece 600 geeggeaggt tgggggeegg ggeggagggg geaaacagca ceecagggge geeegtggee 660 ccatctgtcc tgaggttggg ccggggagcg ggtttgcggg gtgacaggag ggtggtgcgg 720 teegtgacea ggggaaaggt ggtgtaaaag teetegtegt eegtgggggg gaggetggag 780 teaaagacet eeeeggagge gaageeegag geetegatgg geteetegea gtegetgteg 840 900 tecegetegg cetggeaegg geceeeagag ggegggegge gegeggeggg egggggeage gtgtcttggg tggcgccac tcccgtgagg aaggggtaga aggtaggggg cgggggcacg 960 aagggggatc gggtggccac gggagggggg tctaaggagt cctccgtgat aatgggcaat 1020 attaactete etceagtact gggeteacac tecteeaggt ceteateate gettggacae 1080 teageagagg ceaceageag gteatetgtg ttetgggtgg tgetgteeët eagtgtgggg 1140 gageggeece ggegegtggt ggtagtggee atggtggtgg tagteteeat gatggtggtg 1200 gccatgtcag ccagcagggt ggtggccgtg gtctccgcac tgagcagcac ggacggcccc 1260 tececeacca ggegeaggtg acceteagte egeacattgg ggtegetete ggeggeeage 1320 gccagcacct tgagcccatt gtagtagagg ccggacacct ggccctggaa ggggcggccc 1380 tgatcccggc'ccccgatctt gatggcagcc tggctgttga agatggtcag ctggcggcct 1440 ttgtcgagca gccactcatc tactactcga ccaagccggt aggggattct ctgtctagca 1500 ategocagge getegttate aaagttteet geegggtace getegttgae eggeeagetg 1560 tecacetgea gggtggegtt geegeegett egagtgaage geaceaegtg gtatttgeeg 1620 tegettaeta tggegttggg etegtegatg gtaatgtegt eegtgeeeac gttaaagate 1680 acccccacgg tgccctggtc gatgtgcagc tgcaggtagt ctccaaggcc ggaggcgctg 1740 tecaceegea ecageacage geteegetgg tgggtgetga ageecaegge caggegatee 1800 atcctcgtgc tgggcctgtc attggggggc cacgtgtagg tgatgagcgc tcccccttc 1860 ccaaagatgt atgtggtccc gggatcattg cagacagggc ctccatagga agtcatggtg 1920 cagtegeagg tgaagecate ecactgetge aageagaege eetggttgge acaggaetet 1980 tcagtgcagg tggtgctggg gccatcacag cccctctcca cctgcccaat gcggtgcagg 2040 gcgtcggcga tgaggtctgg gagacgtccg ttgaggtcca ctgaggccag gcagcctga 2100 aagccatccc gggaggccac cagcttgggc aggttgctga acatattctt gctcagaccg 2160 ccaatgtaca actoccottt gagatcgagg tttcgggcgc cattggagtg ctgcgtgaca 2220 gtgcgggagt caatcttgag cgtgtgcacg ttgcctgggt ccctggacac caccacgttg 2280 tgccactggt tgtcattgac tggtttgtct gagttcccct tcatcaagga cgggccattc 2340 cccaggtcaa acacgtagtg gatgtacccc ttgaccagct cgatgacaat gaagtcattg 2400 ccgttgcccg agttgaacag aagaagccca tcaggggccg tggtcttgaa ctggaagaag 2460 aggtgcatgg aagcataggc ttggagcgtg gcgagtgcca ggtagctgct gcgactcttg 2520 aaggtgacgg gatcggccac aatggcacgc aggccaaagc gagcattgag ctcacagtag 2580 gtgatgtcac catcettgca ctggtccatg tagggetgge cattgaacac gageccaete 2640

```
agatgcccga tgaagttgga gggcaccacg gagataaacc gccgctccgt catgatgccc
                                                                     2700
                                                                     2760
gtotcaatgt tgtggaacte cageegeata tgggeteetg ceatetgtee etecaeagte
                                                                     2820
acgttgtcca cagacagetg caggetettg ccacgeegga ccacceteae egtgtgeeae
                                                                     2880
tcattgtcat tgagcttgtg ccccgcaaac agcgtttcgg ggcctttact gggtgcgcag
                                                                     2940
ccgacgcgca ggcagtcgag gttgacagtg agcttcatct gccccccatc cagctccagg
cgtagggtgt cggcagactc cctggaagtg gtggccatca tgagtccgta ggcccgctgg
                                                                     3000
                                                                     3060
gacatgaaac gcagggacac atectetgee teegtgtgea tggegttagg cagcatgate
ttcatgtaca tggagccatc gtagctcagg accgtggcct ctctctcaca gacccgccca
                                                                     3120
agaaagccgg teeegatgea gteacagatg aageggttee ageetteteg acagaegeee
                                                                     3180
                                                                    ,3240
ccattgcgac agggggcaga tgcacactgc ttcagcgtct cccgggagca aaagggggca
acgeceacag ecceetgage etcagecagg ecceggaggt eteggetacg eccatetatg
                                                                     3300
                                                                     3360
aagaggteee geacacagee caegtageet geeeggagtg etgetgteea caeetetggg
                                                                     3420
ggcaggggca ggtccacccg gccccctca gggagaccgc ccaggtacag ctcactctcc
aggtccagaa tctcgctgtc tccagtggcc aagaacggcg tgctgcgact attcactgag
                                                                     3480
atggageett ttegeecate eetetggaag tecaegtgae accaetegee ateattgaee
                                                                     3540
ttgeggetgg atgeeegeag ettgatgeee eeagateeea tgteeageag aagatagagg
                                                                     3600
                                                                     3660
tggccgtcca atagetecat ggcaaagtag teggeeeget gageagaget gtggetgeea
                                                                     3720
getecacece cageeegeeg geeetggetg aagageagea geeeattggg eteggtggtg
                                                                     3780
cggaagtcta gggagatgga gccagtgcgc ttagcgctcc agcggggcag cgccacaaag
                                                                     3840
gcctcgggac tctcaaaggt cacagggtcc agggcagcca catcctcaca gcggaatgac
aagtccccct gcagcttcat cttggggtcc ccttcctttg ccaggcggga tagttccaat
                                                                     3900
ttgaagtcat tgttcttata gaccacgtcc ttgaggcagc ccatgaagtt gttgctgacg
                                                                     3960
                                                                     4020
ggegageeeg geaggteage tgtgttgggg etgeeeeeaa tgtagaagaa gteateagag
                                                                     4080
cccagcatgg tgtaatcctc ctgcgtgtag cctgtggtgg tcaggatccc gtccaccgag
                                                                     4140
atggtcacca tagcgtgtcc aatccctgcg tgctggcgca ggtttcgggt gacccggacg
                                                                     4200
tegtgecagg egttgtegtt gaacttgeea ttgaegggtt ceacaaggge etegaaggea
cctgagccta ggttgatgac cagccagaca gccccagact tgagggacag gttgacgtag
                                                                     4260
                                                                     4320
teggeegact tgeetgtatg eageateagg cegttgegtt geagggtgeg gaaggeeagt
                                                                     4380
gtgateteat cagtgetget etggatgggg ttgtgtgaca ggtegtagea gaagaaetea
                                                                     4440
ttgcctttga aggtcgccac aaactcctcc ttgccttttg ttggctggtg cacatcgccg
                                                                     4451
getectecte t
```

```
<210> 5237
<211> 1230
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1198)...(295)
<223> similar to gil041396 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5237
ttttttttt ttgggatttc aaaagtttat ctcaatctcc tcattcccag acttccaggt 60
gggaggcagg ccgggcagta atgtgagcat ctcaaggaca ccacagtcac tgcgaccaag 120
ccagtctgtg tcctcattta cacaatgaag gcgatggacc acatagtctc tgacgtccca 180
ctgcaccctg acagctgaca aatctgtttg tcctcaaaga caggtctgag agggaggaaa 240
actgatgggg atgatgagtt agagctccgg gctccctggg gctggaggct catccatcag 300
ctgccggagg tgagaggctg ccttgtccag ttttgacaat tccagctgga gggaagaaag 360
```

```
420
cttttgttgc ctctgagtcc ctgcctcccc ttctgatggg gtcctggctg tgaggctatc
aagetgette tgeaacttgt acetteggge ggetaacaga ggtagetgga tetgegggte
                                                                      480
                                                                      540
caccaggeee tgcageteca tgtagaettg ageegtgtea etgagtggag eetgggeeea
                                                                      600
gccggaggga gctgctgtgc ctgggggtaa caggcccaca gccccacagt agcccagggt
gcccaggggc tccaagaagg cctcgaagag gccctggtcc ccaggctctg agctctgcag
                                                                      660
cagcactcgg ggccgggctt tggtgagctg gtacgtggct tggagagccc ttagcacctg
                                                                      720
cacgacetet tggacecggg agaagegeeg etceagetet ggetggegee agtgeteeaa
                                                                      780
gctgcaggcg ctggggtagg gggcaaccga gatgctgggg gcaggggggc aaccaggcct
                                                                      840
ggggggcagc ctctgccaga gctcttcagc caggaagggc atcagtgggg ccaggaggcg
                                                                      900
gaggccgagg tcagcgcagg agaacaggac ctgagggggc cccagggggc ggggcgagtg
                                                                      960
                                                                     1020
ccacagcacg ggcttcacag cctccaggta gacgtcacag aggttgtgaa gccagaagtg
gtgcagggca tgagtgacga gcgagagctc tcgggtgagg aagccccgct cacactcctg
                                                                     1080
ggcagccagg gcaaggcggc tcaggatcca ggcatccatc ggggaggagg gagacagctc
                                                                     1140
                                                                     1200
ctcagcagac tgtggcacaa atttctcccc taaagcattg aggataaagc gaagagccct
                                                                     1230
cgtgccaagc ttggcgtaag catgaacagc
```

```
<210> 5238
<211> 2222
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1985)...(1512)
<223> similar to gi603953 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5238 aatggagggc agtagaaaga ccacagctcg cctcaacctg gggtttatgg ggctcaatta 60 ttatccccg ccagcttcca aattgttttt gtttactttt tttttgtttc attttctagt 120 180 tattttattt tgttttttt tttttaaaaa tatgtttatc tttaatgatc caagattctg 240 caagtcacgc tgatataccc agaattgggt ggaaatacag catctcagca gtgctactgc 300 cagectgggg gtggggaget ggatgetgge tgaaggaeee ecatggtgaa gtegatteea 360 accteacggg agecteagtg cectatetee atggaaacca geetggcact gggatgggge cctagggagc ctgcatgaac atctctgaga ggtatttccc attaaaaaca accacaggtg 420 cccacccca ccccaagcta ctgcccagct cccctcctc tctgtgttgt cggccaagat 480 540 aaaggaaatg ggagtgacca cttaacgaca aacaaaagca gattgtacct cctattaggg aagaaaaagg aagggaaagg gtagtaaggg agctgcactt caagctcaga attctgccaa 600 gaccctagag cggctatggc agacagcggt gcatgactgc cagagggcag cgctacccaa 660 accortgag gtaccotttg ttactgotgg ggcccctgct gctgtggggg aaagacgggt 720 cttcaagget getteetgee atetageget geecaatgtt tggaccaaaa ggggatggea 780 cctaggatgg ctctacaact ccatactcag tacgaaaaga gggctcccag gatctcaatg 840 tggtatcagg gatgagagtt tgcccaaact coctecttee caccetgetg gactgtcaga 900 gctctgggct aggaagaact ccagggaagg ccaggatgag tgggggaagg agacaagaaa 960 atggtctcca atttggcatc aaaacagagt aagttcaaag aaacaaaacc ttgattttt 1020 1080 tatagcaggt tetectggee ageteatgae ageaggtete cacceaetea gggatggeee aataaaaagt tgggcaaagc aagggcatgg ctaccetcag ggcagtgcat ggaactcaga 1140 aaagtgagtc tacaggatgc aggagagaac agcagagccc acagctctgc cactctgata 1200 1260 tgtcctccat cagtcccacg tgccctaggc actgacctca tacctgcctc aggagcagct teetteagge tgagteetgg caggggaaag tteecaggea ggtgteecag aaggaacatg 1320

```
agtgttetet geagggeeet geetgagete tteaggggat ggagaggagg ceacceacte
                                                                     1380
ctcatgccag gtgcaatgct ccccagtccc ttttcaagag ggggaagaag ccagcactgt
                                                                     1440
gggccccagg tggccccatc tcaggaatga cagggcattc tgcaggggtg gcacattctg
                                                                     1500
aggetettag gecetgtgea tetggatgaa ggagaggaeg teeteettgg acagettgte
                                                                     1560
                                                                     1620
ctggtcctgg ggcttctggg agtcatgcac acgaatgcca tcccccact cccagaagag
                                                                     1680
ccggccatag tagcaaatgt gaaatggggc aatggagtct gcagggaggt caaaagtaga
                                                                     1740
gtccttggtt ttcttgttgt agaagaactt cttcttgaag cttttgctga atcccatagt
                                                                     1800
ccagggctca ttcactgtcc tgacgatgta gaggcccatg ggtacaaagt gccggtcatc
acgecetgtg tagetgaget ttggggtgee actggageee ttgatgatet teateteeaa
                                                                     1860
cctgacaaaa atcttctcca tctcttccag tctgtacacc tccttcaccc tgatgggatt
                                                                     1920
catgtcgggc cgactaggct tggaaacggc tttcacaaat ttctcggcaa gctgaattct
                                                                     1980
                                                                     2040
acaatccaaa cagtctctct gagaggcaag ccaaggatgc ctccaccagc acccctaccc
ccagggcatt ttcacagctc cagtaggaga accttctgaa tctgcggcaa gactgctcta
                                                                     2100
agaggcagca cccatgtccc ccaggaagcc cgcctgccc ttctccaccg acgtctttat
                                                                     2160
tectgegeet egtgeeaagt tgggegtaat egtgttetae tgtateaate geaceeeeee
                                                                     2220
                                                                     2222
```

```
<210> 5239
<211> 2842
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2844)...(911)
<223> similar to gill63174 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5239
caagggettt caggtettea ttettttgga gaacgeecta gaccatgagg gtatgggaag
                                                                       60
teteatggca ccaggagage cacetecagg gtgaggggat gteagacagg aggggeteag
                                                                      120
gagggegece tecaggetga ggggatgtea gacaggaggg gaceaggagg gegeeeteea
                                                                      180
ggctgagggg atgtcagata cgaggggacc aggagggcgc cctccaggct gaggggatgt
                                                                      240
cagacaggag gggatcagga gggcgccctc caggctgagg ggatgtcaga catgagggga
                                                                      300
teaggaggge accetetagg etgaggggat gteagacatg aggggateag gagggeacee
                                                                      360
tctaggctga ggggatgtca gacaggaggg gaccaggagg gcgccctcca ggctgagcgg
                                                                      420
agacttttac tctgtgattg acaacagttc ctgggcaatc ctagatcagt agtcagaaaa
                                                                      480
cettaactgg aaaagagaat geatggegtt tteatttete tgaggaagee gagaaacttt
                                                                      540
aattaggtga cggggttccg agcacttaag cagatggggt gcggtgaagg cccagggagg
                                                                      600
aggagggcag ggaggtgcac gtcctctgtg ccccacacac tttcaaccac tgcaacaaac
                                                                      660
aagcacccaa gagaggctgt geggcagagc cetgcaccca caggcetttg acagcacagt
                                                                      720
gaggggcctc cgcacgtggc ctcgggacgc tcactcgacg cacacccggt gcatcacact
                                                                      780
ggcacctaaa gacaggccgt gcagctaaaa ggagcacgtg tggccaagga gagcaatcag
                                                                      840
ctgtcccgcg tttctaaagg cagggaccga ggctgtggag gggcgagcag ggcaggccgg
                                                                      900
eggaggetae ttgageaget tggeeaegtt eaggetggge accaeatgt cettgaagag
                                                                      960
gggcacgtag ctggggctgg cctgtgctgg gccctgctcc agggtctcca tgatggtctg
                                                                     1020
cttcatgtca cggctggcgt ccccacgcac agccagcagc gcaccgatgt ggtcatccct
                                                                     1080
gatgtctgga tacttgctga ccagagtgga gacctccagg tagagcagag aagggtctgt
                                                                     1140
cagettgate aetteggeea cagecaegat ggtgtegeag tateegteea egtetteeee
                                                                     1200
gaaaccggac gccagcttcc ggaacaggaa gcgcagctgc tctgcctccc taaccatctt
                                                                     1260
```

```
1320
cteggcacce teettgeget ceteeggget eeggaaggaa atgegettet geatgacege
                                                                     1380
cogeaggtac tecaceacea egegeeggtg egecteggee gteatectet tettataegg
ctttttaatt ttggcaaaat cgttgaaata gtcttccacg gtgacacaga taatgtctac
                                                                     1440
                                                                     1500
agogtttgac cotaatagoc acttottogt catoaattoa ttoagatgtt gotocaggto
                                                                     1560
caggaagacc tectecagea aacegetgea geceteette gegatggegt etaaaateee
gtccatgctg ggctggctcg gagacacacc ctcttccact tcattcttta aatactttct
                                                                     1620
ttttaaactg actatggatt ccttgaaggt ctggcagttg ttgatgatgg cgatcatgta
                                                                     1680
ctgaacgtag cagtgagggt gctgccgatt cctcaggtgc tcttctttat acagctgcgc
                                                                     1740
ttcatcttta tatctgctta ggaaagaatt catctgctga agacataaaa ctagtacctt
                                                                     1800
tgttttcaaa tcttcactta tctgagcagc aacttgaaga ttctgttcaa acatctggaa
                                                                     1860
                                                                     1920
gacaatggca gggagtgtgg tetggtagta ceegteetgg teggettetg getetgtete
tttgacccag tctttcttgt ctgtctccag cgctttccgc agccaggcga tgatgtttga
                                                                     1980
agtgagcgtg gacatgtacg tgtcaagcag ctcagagacc acgtgtggag aaagcaatgg
                                                                     2040
ctccagggtg ccgacatcca cttccggggc cagctccacg ttcctcatca tctcagtact
                                                                     2100
tgtgtaggtg tttaagaccc acgtcaagag gctcacgatc tcattggctt ccaggtcttc
                                                                     2160
cgatgcgagg tectgcatec gegtgeteag ggettggtgg tacatgttea ggaggttett
                                                                     2220
aaagatotca tagtggggag gaaagcactg aaccatcagg tttttggcga caatgaggtc
                                                                     2280
atccaggacg tactteetta taattteeag gtggeggaca agccacatet tgteagacte
                                                                     2340
tetggtatet geetgtgtge eetcaattet ggtggteaca gteeteteea agatggtgaa
                                                                    ,2400
cattttetee ttecaattet tgggeeteee aggaggaaca aagecagttt gettttteeg
                                                                     2460
gtcaagtatg cgcctgtcaa ttttctcttc cctttcaatg atcctgacaa ctgagaccag
                                                                     2520
caaggtgggg tcacggcgga cagtgaccag tgacctctgc agcaccatcc acagctgctt
                                                                     2580
agccagetea teagagagee cetgegtget gecaaagtag ecatggatga gggteatgte
                                                                     2640
                                                                     2700
acgegtgtte ceaetgteca tgeggtaetg etegtaeate agecegtece gggageatte
caggtccatc agcttccggt gggcttgcag gagtgcccct tgttcaatta ggtcctgggt
                                                                     2760
eteceteaca ateteaggea etgagaagat gttettgagg ttetecaegg etgeggegag
                                                                     2820
ctggctgtgc tgcaccacgg cg
                                                                     2842
```

```
<210> 5240
<211> 1299
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (47)...(542)
<223> similar to gi4006818 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5240
cccacgegtg cgatgtttgg ttgcccctcc ctgtagcctt ttcctggggg gtggggcccc
                                                                       60
cgcaggtgtg attcgctcac tgcacagcct gggccgcctg gagcatgcct tctgcacaga
                                                                      120
gaccoggood tacaaccagg gagcooggot gacggoottt gagctggtot atgagcagat
                                                                      180
eccegecace ettateaceg acageatggt ggetgetgee atggeceata ggggegtgte
                                                                      240
agctgtggtc gtgggagctg accgcgtggt tgccaacggc gacacagcca acaaggtggg
                                                                      300
cacctaccag ctggccattg tcgccaagca ccatggcatt cccttctacg tggctgccc
                                                                      360
cagetettea tgtgacetee gtetggagae eggeaaggag ateattattg aagagegaee
                                                                      420
gggccaggag ctgaccgatg ttaatggggt ccggattgca gcacctggga ttggagtttg
                                                                      480
gaateetgee ttegatgtea eeceeeaega eeteateaet ggtggeatea teacagaaet
                                                                      540
gggggtettt geceetgagg ageteeggae agecetaace accaecatet etteeaggga
                                                                      600
```

```
tggaacceta qatggacccc agatgtaacc aactcaactc tecetageet geetetetag
                                                                      660
                                                                      720
gtttttcaat acatttcttg aatggctacc caaaagctga ccgtccagcc cctgaccaca
cttgttccta gtgcagggag ctcagacagg gccttccatc tagagcccag cacctagagc
                                                                      780
caggetgeee agatteaaat eetgaeteeg eeacttttee caetgtatga tettgggeaa
                                                                      840
qtcacttcac ctctctgtgc cttggtttcc tcatttataa aatgtggata acaggccggg
                                                                      900
cgcagtggct cgcgcctgta atcccaaggt gctgggacta caggcatgag ccactgtgcc
                                                                      960
tgaccttaca gcagtatttt ttaaaaatca aaattaatgc aaaaatccat gatgaggcca
                                                                     1020
ggcttggtgg ctcatgcctg taattccagc actttgggag gatcccttga gcccaggtgt
                                                                     1080
ttgagaccag tttgggtaac atgggaagag cttgtctcta caaacaaaaa tttaaaaaaca
                                                                     1140
atgagetggg catggaacte acaeetetag eeccagetae teaggetgag gtgggaggat
                                                                     1200
ggettgagee caggagttea aggatgeagt gtgetttgat tgeactactg egetteacee
                                                                     1260
tgagcaacag agtgagaccc catctcttta aaaaaaaaa
                                                                     1299
```

```
<210> 5241
<211> 728
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (30)...(560)
<223> similar to gil669498 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5241
cegggtegae ceaegegtee geaaatatat gtgaggtgtg caacaaatgg ggaeggetgt
                                                                       60
tetgetgega caettgteca agateettte atgageactg ceacateeca teegtggaag
                                                                      120
ctaacaagaa cccgtggagt tgcatcttct gcaggataaa gactattcag gaaagatgcc
                                                                      180
cagaaagcca atcaggtcat caggaatctg aagtcctgat gaggcagatg ctgcctgagg
                                                                      240
agcagttgaa atgtgaattc ctcctcttga aggtctactg tgattcgaaa agctgctttt
                                                                      300
tegeeteaga acegtattat aacagagagg ggteteaggg cecacagaag eecatgtggt
                                                                      360
taaacaaagt caagacaagt ttgaatgagc agatgtacac ccgagtagaa gggtttgtgc
                                                                      420
aggacatgcg teteatettt cataaceaea aggaatttta cagggaagat aaatteaeea
                                                                      480
gactigggaat tcaagtacag gacatctttg agaagaattt cagaaacatt tttgcaattc
                                                                      540
aggaaacaag caagaacatt ataatgttta tttagccatt cttatctcct cccttcagat
                                                                      600
cetetggeag etagetaege aatgtgeetg tggteeeaet aatetgtgae tgeteetgtg
                                                                      660
gaaactccac atcacaattc tccaaaattt atcattgcca ttttaaaacc gtcttttcag <
                                                                      720
ctttcaat
                                                                      728
```

```
<210> 5242
<211> 1922
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (1)...(1827) <223> similar to gi5630076 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5242
atgggaagtg tcacagttcg gtatttctgt tatgggtgcc tttttacatc tgcgacctgg
                                                                     60
120
cccgtcaagg ggtctgggcc ccacggacca tctccaaaaa aattctatcc ccgtttcact
                                                                    180
cgaggcccaa gtcgagtgct cgagccacag ttcaaagcaa acaaaattga cgatgtgata
                                                                    240 -
gacagtcgtg ttgaagatcc agaagaaggc cacttgaaat tctcttctga attaggtatg
                                                                    300
atttttaatg aacgcgatca agagttgaga gacttgggct atcagaaaca tgcttttaat
                                                                    360
atgettatea gtgacegett gggetaceae agagatgtge cagacacaag gaatgeageg
                                                                    420
tgtaaagaaa agttctaccc acctgacctg ccagctgcta gtgttgttat ctgtttctat
                                                                    480
aatgaagegt tttetgeett getteggaca gtgcacagtg teatagaceg caegecagea
                                                                    540
cacctgcttc atgagatcat ccttgtggat gatgatagtg actttgatga tttgaaagga
                                                                    600
gaactagatg aatatgtcca aaaatacctc cctggaaaaa ttaaagtcat aagaaataca
                                                                    660
aagcgtgagg ggttgattcg agggagaatg attggcgcgg cccacgcgac aggagaagtc
                                                                    720
cttgtgttcc tggacagcca ctgtgaagtg aatgtgatgt ggctgcagcc cttgctggcc
                                                                    780
gccatccgtg aggaccggca caccgtgggg tgcccagtga ttgacatcat cagcgccgac
                                                                    840
acgctggcct acagctcgtc ccctgtcgtc cgcggagggt tcaactgggg actgcacttc
                                                                    900
aaatgggatc ttgtccccct ttctgagcta ggacgagcgg agggagccac tgcaccaata
                                                                    960
aagtcaccaa caatggctgg aggtttgttt gccatgaaca gacagtattt ccatgaactt
                                                                   1020
ggacagtatg atagtggcat ggatatctgg ggaggagaaa atttggaaat atcatttcgg
                                                                   1080
atctggatgt gtggcggtaa gctcttcatc atcccttgct ctagagtagg acacattttc
                                                                   1140
cgaaaaaggc gaccatatgg atctcccgaa ggccaggaca ccatgacaca caactctttg
                                                                   1200
eggetggeac atgtetggtt ggatgaatae aaggageagt attttteett aagacetgae
                                                                   1260
ctgaagacga aaagctatgg caatatcagt gagcgtgtgg aactgagaaa gaagttgggc
                                                                   1320
tgtaaatcat ttaaatggta tttggataat gtatacccag agatqcagat atctggqtcc
                                                                   1380
cacgccaaac cccaacaacc catttttgtc aatagagggc caaaacgacc caaagtcctt
                                                                   1440
caacgtggaa ggctctatca cctccagacc aacaaatgcc tggtggccca gggccgccca
                                                                   1500
agtcagaagg gaggtctcgt ggtgcttaag gcctgtgact acagtgaccc aaatcagatc
                                                                   1560
tggatctata atgaagagca tgaattggtt ttaaatagtc tcctttgtct agatatgtca
                                                                   1620
gagacteget cateagacec gecaeggete atgaaatgee aegggteagg aggateecag
                                                                   1680
cagtggacct ttgggaaaaa caatcggcta taccaggtgt cggttggaca gtgcctgaga
                                                                   1740
gcagtggatc ccctgggtca gaagggctct gtcgccatgg cgatctgcga tggctcctct
                                                                   1800
tcacagcagt ggcatttgga aggttaaggt ggatgctgtg gcgggaacgt tgcttcatca
                                                                   1860
ggcgttgcct ccggtgtgga gtttggggct ttaggaaagc ctgggttggg tggagcagaa
                                                                   1920
                                                                   1922
```

```
<210> 5243
<211> 2234
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(398)
<223> similar to gi2352427 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5243
gctatgttcc caatttatta ggtatcatac cttatgcagg catagatctt gctgtgtatg
                                                                       60
                                                                      120
aqetettqaa qteetattgg etggataatt ttgcaaaaga ttetgtaaac eetggagtea
                                                                      180
tqqtqttqct qggatgcgqt gccttatcca gcacctgtgg tcagctggcc agctacccat
tggetttggt gagaactege atgeaggete aagceatgtt agaaggttee ceacagetga
                                                                      240
atatggttgg cctctttcga cgaattattt ccaaagaagg aataccagga ctttacagag
                                                                      300
geateacece aaactteatg aaggtgetee etgetgtagg cateagttat gtggtttatg
                                                                      360
aaaatatgaa gcaaacttta ggagtaaccc agaaatgatg ttgcattttt tgctttagcc
                                                                      420
                                                                      480
tgataattga aactttcaac aatctctgga gtgacttttt ctcctcgaat tgaaacaagt
ctatggcaaa agaagctgca tttttttcac aaaagggaag atggtaacaa tggtcacttc
                                                                      540
                                                                      600
aaacttttgg gctaaattat atgtacacag aaatgttcaa aatcatagtt ttaatgtgtt
ttgaaaaggc cacacaatta tactttatct tttcttaata atcctgcaaa tctctgccct
                                                                      660
gaatccgaaa tctgaaaatg tactggcttg aacaaaattt gttttgtgtg ttagagttat
                                                                      720
aaatcattaa tetttattte gggtggttta egtttatgee agtteettta tatttaaatt
                                                                      780
tettgtttta tatattttga atgtetttat agatttettt aaattteett atagaaceat
                                                                      840
taatagaaaa tcattacatt taaaatatac cttacagcaa aagcatccaa ataagtatag
                                                                      900
ggtttatgtc cttatttttc tttcagctga atacgaatga acacagtggt ggaatttctg
                                                                      960
aagggaagtg atgaaattat atttatttca gtgggcactt ttccatttta ccactgtacc
                                                                     1020
attatttggt teetggagtt atacactaat tttcagtata ttactgttaa attaccaaca
                                                                     1080
caaggcaatt tatttgaaag attccgttta tcctgccatt gctttgaaaa gcagcaggaa
                                                                     1140
acgaaatcct ttgacttgta tcagcttctg cagagcatct ttgttttcct ttgtcctttg
                                                                     1200
tttcctacct tttgaatcag attccgtttt agtcaggaag acttcttggg accattctta
                                                                     1260
gtaacctgaa atttettttt taattgeatg aagtggattg atcatgagea aatgatgtge
                                                                     1320
ttatttctcc ctcactgttg aatatctttg aacttgctgt tttcaatatg ggcagcacaa
                                                                     1380
                                                                     1440
aggtgagaga tacatattaa tagtagtatg tattactett atacattaga tacetatatt
taaatgaaag gcccaatttg taaacatata cattcatatt ctctcttgcc ccaagtttta
                                                                     1500
ggaacatgtt aggatatagg agacttaatt tataataatg agagcatttt tttattttac
                                                                     1560
taaagccatt tttatagtca actatctttt cttatttgtg tgattagaac ttagaaaaat
                                                                     1620
atttactagt tgaagttatt atcagttttt aatttagttc ttaaactcat ttcacttcta
                                                                     1680
ataatttctg ttataaattt ccagcatttt aatgaaaatc taatgatgta ataggcattt
tetttatttg aacetacete ttttatttte tgaaceaaag agaaagatgg aetggtgttt
                                                                     1800
gtgaaacatt tttaaaaaatg tagtttcatt tatattagtt atgtttgata aatgtctcag
                                                                     1860
tatttttata atatgataag cetgggatte taettttagg gttatttgta ettttgagta
                                                                     1920
atatataaag tgacaatatt aaggtacatg atcagctctt tctattttta ctcgtaaaaa
                                                                     1980
ttatggaaat gaataatttt gctaacaact ttgaaatttc aaacttctgg aaaatatgaa
                                                                     2040
aatattcatt gttcattatg aatttaaatt gtaaggtatg aatgtgattt gtctgtacat
                                                                     2100
cttgtatctt ttccaaaaaa tgattctgta tcttttggaa aaaagccgag agttgaagat
                                                                     2160
agtatattic tggtagtact gaatatttac ttacagtttc tatcaaaaat atatatttgt
                                                                     2220
ttctaaaaaa aaaa
                                                                     2234
```

```
<210> 5244
<211> 1011
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1012)
```

- < 223 > n = a,t,c or g

```
<220>
<221> misc_feature
<222> (4)...(526)
<223> similar to gil550785 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5244
cccgggtcga cccacgcgtc cgaccagcag gcggagaggc aggtgaggga catgttccgg
                                                                      60
gaggacgtcc taaaatggat ggtcatcgtc ttcaccagga aggaggacct ggccgggggc
                                                                      120
tecetgeacg attacgtgag caacacagag aaccgggeet tgegegaget ggtggeegag
                                                                      180
                                                                      240
tgcgggggcc gggtctgtgc ctttgataac cgggccaccg gccgagagca ggaagcccag
                                                                      300
gtggagcagc tgctggggat ggtcgagggc ttggtgctgg agcacaaggg cgcccattac
                                                                      360
tecaaegagg tgtatgaget ggegeaggtg etgegetggg eaggeeetga ggageggete
                                                                      420
cggcgggtgg cggagcgcgt ggcagccagg gtgcagagga ggccatgggg cgcctggctg
                                                                      480
teggecegge tgtggaagtg getgaagtee eecaggaget ggaggetggg cetggecetg
                                                                      540
etgetggggg gegegeteet gttetgggtg etgeteeaca ggeggtggte ggaggeegtt
geggaggteg ggeetgaetg acagegeagg tectaaaaet gaaggeaaet tggttaaggg
                                                                      600
aggetgaatt ettggagetg aagggaaaac tteatteeaa eggaaggaat eetgtagttt
                                                                      660
caggeatagt tttaatgaca cagaaaactt tgctgcatca cctttgcaac tttgccaaag
                                                                      720
ctcagagttc actttttaag tttttaactc attttaaatg atgtgtatgc agagttttaa
                                                                      780
aataaattcg tctaacaata acttcctttg gtagttttgg tagtctaatg tcaagtagct.
                                                                      840
tgtagtgggg acaaacgcat ggcacaggga aaacaagtgc cattattttc gagcttttta
                                                                      900
aaaaatttag actgcccctc cttgataatt ttctagttct tatacatggg tagataggtt
                                                                      960
cctttgtgat ccttgtagac ttttagcatc aataaaagaa atgtggnggt a
                                                                     1011
```

```
<210> 5245
<211> 1201
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1135)...(519)
<223> similar to gi3327094 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5245
tttttttttt ttcattctaa gagcagtttt tatttagaaa tgtgcttcca caacttggtg
                                                                       60
gccacctggg ggcaggtagc cccggcttgc ttgttctctc tttcctagcc caggaatcgg
                                                                      120
gtccttgggt ctaaagcaca gggccaagtt ctcaaggatc aacatcccag acagctccca
                                                                      180
tggtctgggg cttggagctg gtatgaaggg tgaaccaggt tccatcctgg actgtttatg
                                                                      240
gttggaggge etgggeeeet ggeaceagga eeteagetee eteteetagt aagagetggg
                                                                      300
atcacccaca ggccagctgt ggccaggtcc tggtggatat gacattggga agaacaaggg
                                                                      360
gctaagagag gctaattttc tggtgctgga tccagtttat cttcctgagg ggtggaagcc
                                                                      420
ggggcaggag ceteateeee accattgagg gaettetget geteattget gttgggegag
                                                                      480
ggggtcctgt tgccctggga tccccagcgg gtcaggcgct ttagggagga gtcacggtgg
                                                                      540
gcaagcagag ggggctggaa gcctgagaag gagctgctgg tgaccggacg cttatctcca
                                                                      600
```

```
ggetcaattg gatgcatcag ceggtteate tggacattee agtgttteae gttggtgetg
                                                                      660
geotggegea gttttetetg ggeageetee acateetegt eageeetetg eeggttetge
                                                                      720
cgcacctcct ccagctgctg ctgggcctgc tgcagggagc ggctctgctg tgccatctcc
                                                                      780
tgctgcaget ettecttete etgetgegee egttegatgt agegeteetg etecteette
                                                                      840
agetgeatea aetgetteag ettetettee teetetteea geagtetggt etgagegatt
                                                                      900
egeacagatt etteateteg eegagettte acetetagtt geagggeete etgeaacege
                                                                      960
tgctgcatct cctccagctc cttgatgcgc tgccgctgcc gggcagcctc ctcctccttc.
                                                                     1020
agetecatet cageetgeat ggaggeeegg geetgeteeg cetegegeag ttggeeeteg .
                                                                     1080
agegeetget geagetegeg gtgetggetg eggegeegtt ceteeteete etgeageage
                                                                     1140
cgctcggcct gccgatgcgc ctcctcggac gcgtgggcgg acgcgtgggc ggacgcgtgg
                                                                     1200
                                                                     1201
q
```

```
<210> 5246
<211> 1605
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1606)
<223> similar to gi6002605 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5246
atgggcatcg tggagccggg ttgcggagac atgctgacgg gcaccgagcc gatgccgggg
                                                                       60
agegacgagg geegggegee tggegeegae eegcageaee getaetteta eeeggageeg
                                                                      120
ggcgcgcagg acgcggacga gcgtcgcggg ggcggcagcc tggggtctcc ctacccgggg
                                                                      180
ggegeettgg tgeeegeede geegageege tteettggag eetaegeeta eeegeegega
                                                                      240
ceccaggegg ceggetteec eggegeggge gagteettee egeegeegge ggaegeegag
                                                                      300
ggctaccage egggegaggg ctaeggegec eeggaceege gegeeggget etaecegggg
                                                                      360
ccgcgtgagg actacgcgct acccgcggga ctggaggtgt cggggaaact gagggtcgcg
                                                                      420
ctcaacaacc acctgttgtg gtccaagttt aatcagcacc agacagagat gatcatcacc
                                                                      480
aagcagggac ggcggatgtt cccattcctg tcatttactg tggccgggct ggagcccacc
                                                                      540
agccactaca ggatgtttgt ggacgtggtc ttggtggacc agcaccactg gcggtaccag
                                                                      600
ageggeaagt gggtgeagtg tggaaaggee gagggeagea tgeeaggaaa eegeetgtae
                                                                      660
gtccaccegg actececcaa cacaggageg cactggatge gecaggaagt ttcatttggg
                                                                      720
aaactaaagc tcacaaacaa caaggggggg tccaacaatg tgacccagat gattgtgctc
                                                                      780
cagtecetee ataagtacea geeeeggetg catategttg aggtgaacga eggagageea
                                                                      840
gaggcagcct gcaacgcttc caacacgcat atctttactt tccaagaaac ccagttcatt
                                                                      900
gccgtgactg cctaccagaa tgccgagatt actcagctga aaattgataa taaccccttt
                                                                      960
gccaaaggat teegggagaa etttgagtee atgtacacat etgttgacae eageateece
                                                                     1020
teceegeetg gacecaactg teaatteett gggggagate actaetetee teteetacee
                                                                     1080
aaccagtate etgtteecag eegettetae eeegacette etggeeagge gaaggatgtg
                                                                     1140
gttccccagg cttactggct gggggccccc cgggaccaca gctatgaggc tgagtttcga
                                                                     1200
gcagtcagca tgaagcctgc attettgccc tetgcccetg ggcccaccat gtcctactac
                                                                     1260
cgaggccagg aggtcctggc acctggagct ggctggcctg tggcacccca gtaccctccc
                                                                     1320
aagatgggcc cggccagctg gttccgccct atgcggactc tgcccatgga acccggccct
                                                                     1380
ggaggctcag agggacgggg accagaggac cagggtcccc ccttggtgtg gactgagatt
                                                                     1440
gcccccatcc ggccggaatc cagtgattca ggactgggcg aaggagactc taagaggagg
                                                                     1500
cgcgtgtccc cctatccttc cagtggtgac agctcctccc ctgctggggc cccttctcct
                                                                     1560
```

```
<210> 5247
<211> 662
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (436)...(323)
<223> similar to gi34388 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5247 attititti tgtgtttttc ttcattctaa tttcatttgt tctgttatgc atgtcttttc 60 ccacacatat tccaaatctt ttaggggagt aaaagcagtg aaaataacaa aattatgttc 120 cacatgccca agtcacaaaa tgtattaaat atgataaagt agcggctgta caaaattgga 180 caaattgaca aataacaatg ggtcaggaac actgtatctg tttgatacag gagtgatatt 240 gaaaaagggt totgttttta otttototta tttgtoatca aaaaagaaaa ttgcatotto 300 cataaacaga ttccagaaaa agaaatttat tgttacctct gcgaagttgt ggatagcttc 360 tggtggtaag gatggtattg aacacgttta cgtctgtccc ctttctcctt tctcctgctt 420 catacaaggc ctgtcaagaa acacaaaagt aaacacttca ctatctgctg aaatgatatc 480 tgcacaataa tgttagacct tgtcaaagat tatataggca atcgctttgt gcccaataca 540 atcagagtag tcaacaataa gattgcaagt tctttaaaga tagggacctt attttgtttg 600 tcaaatatct tccacagttt ctctcaaggt gccttgtaaa cactagagtc tgaatatatg 660 662

```
<210> 5248
<211> 1116
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (105)...(591)
<223> similar to gi5733600 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5248

caacttcaga ttaccagaat gacaaggact agaattggat atttcaggcc actgctctca 60
gccagacccc acccaggccc agcctcaccc tgcagggtct agagggcact ctgatggttc 120
taaaacatcc ctacccaaga aaagtggaag aaccctccat ttatgaatct gtccgggttc 180
acacagcaat gcagacagga agaacagaag atgaccttgt gcccacagca ccttctctgg 240
```

```
gcaccaaaga aggttacctc accaaacagg gaggcctggt caagacctgg aaaacaagat
                                                                      300
                                                                      360
ggtttactct gcacaggaat gaactgaaat acttcaaaga ccagatgtca ccagaaccaa
ttcggatcct agacctaaca gaatgttcag ctgtacaatt cgattattca caagaaaggg
                                                                      420
taaactgttt ttgtttggta tttccattca ggacatttta tctctgtgca aagaccggag
                                                                      480
tagaagctga tgagtggatc aagatattac gctggaaatt gtcacaaata agaaaacagc
                                                                      540
                                                                      600
tcaaccaagg ggaaggcacg atccgatctc ggtcgttcat ctttaaatag atctttcttg
                                                                      660
ccaaggaatg ctctggccca ggagcaaggt ggaatgtttc cctgacgctg tgatctgcag
caggetteaa atgaaaaceg aetaaggatt ttettteaaa aacaaateag aageagatge
                                                                      720
                                                                      780
tgattgggac ccatatacca cgttgctgac tcacgttgct gcccttccat gatgttgcca
tctccttgag aacactgaag caatcaccat tctgatagaa agtgcttaaa ccaccactct
                                                                      840
                                                                      900
taggtetget cactettaga acacacaatg gaagaggaag ggtttttgtt tteacteatt
                                                                      960
gtggtcccca agcctattga cactagttgc ctagagtccc actgtgagtc atggtcagcc
tgtctgacat ccaggttgtg ctattaacca agaaggaaac agatacttgg aggcttagat
                                                                     1020
gacttctgca ggatttatat tcagatagaa aacatcaaat attttcaggg gagaggtttt
                                                                     1080
tttttttaat ttttccccct ttatacaaaa aaaaaa
                                                                     1116
```

```
<210> 5249
<211> 1189
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1190)...(967)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5249 60 gtgtcagggt tgggaccaga gcaggaacac acgcaagaag ggactgagaa ttgtatcaac 120 agcgcaaaag aagtcaaagg aattacttac gcataaaatg aggactgttc ctcagagatg 180 agtcagtcct gagaagccaa ccaagccggg tactctgagt ctggatccga ccttgctaga 240 aatacggtct gaggcagcag aggttctatg agagtccaca gaaggtcagc acaggctaag 300 gtaaaagcag ggcaataggg ttcttgtgtt ctattggcga aagtagaata gaatagaaca 360 gaaaaactga gtgggcaaaa tgagaattgg caaaaaggta tcattaggct catacctacc 420 acaactetac agecetacea ettaceagaa tggatagatt cetagtegtg taaccataaa 480 540 aacagcactg aagatcacaa aaagggtgtc acagagccgc tgatacttgg cataattggc 600 cagtttggct gcctggagaa aggaagaaag aattgagctg gggagaaagt cattcctctc 660 ataggaagaa aagaagagaa gaagaagatg gagaaagaga gattgggttt ttacctccag caagaagtct gagacatcat gtagacacat gatcagagtt cccactcgaa tcatattgtt 720 gatgtaggag aaggagataa gcccaatggt gaccaagtga tgcacaaaca tgatcaggaa 780 gtcctaggaa ggaatggaaa tagaagaggg aggtaaaagc tgggccctag aaacaccagc 840 caacccaacg teetgeatta ttetetgaga atettacece accccatata gaatagttte 900 cattggccgg gcgaggtggc tcatgcctgt aatcccagca ctttgggagg gcaaggtggt 960 eggateacet gaggteagga gttegagace ageetggeea acatggggaa geecegtete 1020 tactaaaaat acaaaaataa googggottg gtggcatgtg cotgtaatco cagotactog 1080 ggaggctgag gcaggagaat tgctcaaacc tgggaggtag aggttgcagt gagctgagat 1140 cgcgccactg cactccagcc tgggcgacag actgagattc cgtctcaaa 1189

```
<210> 5250
<211> 1314
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1315)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (38) ... (1085)
<223> similar to gi1938462 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5250 °
ggaggcagga gaggccagcg gtggtctcat tcctggaaaa tctcttgtgt ttgcaactat
                                                                       60
ggagetgetg atgtteattt tagtaeggea tatgeeacat eteagtaeea aggtgteaga
                                                                      120
ctctccaagt cacatagcca ctaaaactcg actatcagaa gaaagtgctc gtttggtggc
                                                                      180
agecacagtt accatactet etgatttace atceetttgt teaccegetg gatgtatgae
                                                                      240
aatcctgccc acaattctgt tcttaattgc aagaatattg aaagacacag caataaagtc
                                                                      300
tgcagataat caggttcctc caccagtcag tgcagctctt caagggatta aaagtattgt
                                                                      360
gacactttca atggccaaaa ctgaggctgg cgttcaaaaa cagtggacag ctctgattcg
                                                                      420
tagcacgett gettgcatec tggaatatte teaaccagaa gactetgtae etacacetga
                                                                      480
tgaagtaagc atgctaacag caattgcact cttcctgtgg tctgctagta atgaaataat
                                                                      540
aggagtccag tcattacaga atggctgcat gaacagattt aaaaatgcat taaattcatg
                                                                      600
cgacccatgg gttcaagcca aatgttacca gcttctcctc tcagtcttcc agcattccaa
                                                                      660
tegtgeeett teaacteett atatteatte attageteea atagtggttg aaaagetaaa
                                                                      720
agctgttgaa agaaacagac cagccagtaa catagagett ttagcggttc aagaaggaat
                                                                      780
aaaagttett gaaacactgg ttgetettgg tgaagaacaa aacagagtee agetacttge
                                                                      840
tettttagtt eccaetttga tatettaeet getggatgaa aattettttg eeteageaag
                                                                      900
ttcagcttcc aaagatcttc atgagtttgc actccagaat ttaatgcata ttggacctct
                                                                      960
gtatecacat gettteaaga eagtaatggg ggetgeteet gagttgaaag tgegtetaga
                                                                     1020
aactgccgtt cgagcaagcc aagcgagcaa agctaaagcg gctgccagac aaccaggccc
                                                                     1080
ccgccataca ttctggcacc aacaattaaa gctaaaaaaac aaagtttttt ttaatttgta
                                                                     1140
atttcattta atttgtatnt atggttggca actaagcccc taattagtga nggccactgt
                                                                     1200
atcattccag gctanctaat gggtctggtt taatttggaa tattgggatt aatagtgctt
                                                                    -1260
ccaaggtagg gtaaagtgga aataatgctc acaccactta ttggattttt aagg
                                                                     1314
```

```
<210> 5251
<211> 2996
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<400> 5251 ttttttttt ttttattttg tattggtttt atttaaattt tacagaaacc tgatcagagt 60 taagtatgta attataagtc cagtaacaat ttctacaaaa atgcacatac aatgccagaa 120 ctccttaaaa gcaactaata tcatatttgt gttttgcata aaacatgcat taatatgttg 180 gccaaaatca gtctctacaa gaagagacag tccaatacag tcaataagaa aactagttgt 240 300 gaacaacagg taaaaaaaga ggtttccagt taatgtgaaa gaaggaatag tacctttcat aaaacaagcc cttcagcgct gagttaactg atcggtacta ttgtgctgca cgtaatgtaa 360 cacatcacct ccaagacttg gtcctgattg gtcataggaa gtaagggact ttctggtagt 420 tacatcagat atttgagaag attaaaagtt ttccggacat gatggtatac taatagtgca 480 540 accttgcaaa aagggttcga aacattgtca gacttggaag agttccccag cttgataaac 600 aacctcaaag acaccccgag cctttgaacg gagccctctg cacaaggcca gctcagggct 660 caccagcatg teetgtggee acaagacett ecageteeae ataccaecet tegtgaggat 720 ctgcaattag gagcctgagt gccgaagaac atggttgtgc catttctttg aggctttgac 780 tttttataag gcctagttca tctcatccag ggattgggca ctcgaatgaa tacacagatg ctggacacat aaggagtatt aatatacatg gtggccccac agcctgaaat gcttttatta 840 900 acatacatca aggtgtgtct ccgactgtca ggaaagacct tggtcctcca gaggcagaga 960 gaagetgagg gttetetatg tateacaagg cattteetae atagaetgag gggtgttaaa 1020 gagateteat ateaactgaa aggaetteee eteaaatgtg gggetetgta caacetteea tgaggatett caaaaaaaag ateteatagt egttagggaa gtggeggtgg acattaacat 1080 tatatacaca aaactcatca ttcgtgcagc ctcgggcctt gtttgtaatc tcttccacag 1140 tetgtetett ccaaaacagg geteeetgee etgettattt caagtaaget aagteaggat 1200 ctgttttctt tagcagattc aagggggaaa aataataatt tattggggtt ctaataacat 1260 tttcataaca gaatatcaaa ataggtccat ttttgatata tgcttatgaa tatccctgat 1320 aatatcaaga aatccagagg acttcgtaaa ccaccaagat ttcacagggg tgagacccgg 1380 tetgttttet aggeageaga gaagggacta gtataeggge aaatgttete caggaageee 1440 tgtgagcact acagtactga aattctaatt ctagtgccaa tagaatcatg aacgaaaatt 1500 tcacttgaac tgtattagta aaattcataa caaaggcttg cttcctcaac cctgtcatct 1560 gttaatetet eegeetgtga eagacateea gaecagaaaa eeateagtee tggetaetet 1620 ggaggttggg cctagagaaa acaagcccca agatcctttc taagctatga ccaaacctca 1680 gaaaacaggg acgtgaaaga aggagcagac caggcttgag gaagctttga cccaaggcac 1740 cacgateata ggggcgaggg gacctgtaga ggttttaggt gacgggaaga gagccttccg 1800 1860 tgatgcctgc ggaggaggtt ctggaaggca acagetetgt ggcaaaacac acacatetgg gagtgaaata acagatcatt aaacaagacc ccaatttgct ttctcaaaac aaaatcaaac 1920 ttaaaaacta tgcaaataac cctgggtgca ctggagtagg agtacactgg agaagtctgt 1980 2040 ggaatgaget geateagetg agteacagag gaegetgget gtgaagteag catecacaeg gtggctactg cagctaaaga gaatgaaggg agcgcgaggc ctctccaaac agaggaggac 2100 ggaaaggggg ccaaatgtga accacacctc ttttattcca agaatgggaa gcgcattttc 2160 attggcttga atgagaaagc ttcatactcc actctagctg cagtaatact gcatcccatc 2220 cactettett etettittig aetgaaacte ticaaagaac tgetgaatgi eetetetett 2280 aacaaccgtg cetteateag caaatetett gagatagtet ttaagtteag tetteaaate 2340 attgtattca caaatgagtt ccacttgctg gactctattc atgctgctaa gggtatccat 2400 taggggateg etectgteag tggeetggge aatetteeet ttgtttteat aageeagaae 2460 tgtgtcgtat tcatctgtca ggaataagac atctagatct ccatacattt tcatacagtc 2520 ttggcaggta cacaacttgc tacgccagtt caggggccaa taggtggcag tgtctttctt 2580 tataagetge ttagetttaa geteetgaag tttgeageea gattttgatt etgegttgag 2640 gctttcattc ttaaacactg tctggagatc agattcagaa ctagagccgg cacatggttc 2700 2760 actgttctgc tctactttaa cctcccggac atcatccttt ccctgttctg gaacatcctc tttgagggta ctatcttgat gctctccatt ttcaggtttg ataacttcct gatcacctat 2820 tocatcaatg ttocgcacca atocatcatc ctcagtggat attttggtta ctgccaattg 2880 tgcagcataa gcccacaaaa aagaacaacg tttcatgcag gcctggcata ccatctcctg 2940

```
<210> 5252
<211> 1286
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (472)...(1050)
<223> similar to gi4981020 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5252
cceggcagag cegetteece etectecetg tgetgtetge acegaggaga geggeetgee
                                                                       60
gggtgagtag gtccggggcc tctgggccct cgggggcccc tctcctgcag gctcgaggtg
                                                                      120
ggcggggaga aaggggacgg gcgcggaccc gggtcccaag gccaggcctc ccttgtgagt
                                                                      180
agactatgca aagaaaaagt gggccaccat atctggaaac tacagtctat gctttgaagc
                                                                      240
                                                                      300
gcaaaaggga ataaacattt aaagactccc ccggggacct ggaggatgga cttttccatg
gtggccggag cagcagetta caatgaaaaa tcagagactg gtgctcttgg agaaaactat
                                                                      360
agttggcaaa ttcccattaa ccacaatgac ttcaaaattt taaaaaataa tgagcgtcag
                                                                      420
ctgtgtgaag teeteeagaa taagtttgge tgtateteta eeetggtete teeagtteag
                                                                      480
gaaggcaaca gcaaatctct gcaagtgttc agaaaaatgc tgactcctag gatagagtta
                                                                      540
                                                                      600
tcagtctgga aagatgacct caccacacat gctgttgatg ctgtggtgaa tgcagccaat
                                                                      660
gaagatette tgeatggggg aggeetggee etggeeetgg taaaagetgg tggatttgaa
atccaagaag agagcaaaca gtttgttgcc agatatggta aagtgtcagc tggtgagata
                                                                      720
getgteaegg gageagggag getteeetge aaacagatea teeatgetgt tgggeetegg
                                                                      780
tggatggaat gggataaaca gggatgtact ggaaagctgc agagggccat tgtaagtatt
                                                                      840
ctgaattatg tcatctataa aaatactcac attaagacag tagcaattcc agccttgagc
                                                                      900
tctgggattt ttcagttccc tctgaatttg tgtacaaaga ctattgtaga gactatccgg
                                                                      960
gtcagtttgc aagggaagcc aatgatgagt aatttgaaag aaattcacct ggtgagcaat
                                                                     1020
gaggacccta ctgttgctgc ctttaaagct gcttcagaat tcatcctagg gaagagtgag
                                                                     1080
ctgggacaag aaaccaccc ttettteaat geaatggteg tgaacaacet gaccetecag
                                                                     1140
attgtccagg gccacattga atggcagacg gtaagtcttt gtttctattc tcttgcactg
                                                                     1200
gcacaggtga tccctgaaaa ttaaataatt tttgagtgta cacttgagcc caggtgttca
                                                                     1260
agaccagcct gaggaacata gcaaga
                                                                     1286
```

```
<210> 5253
<211> 1380
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(925)
<223> similar to gi307487 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5253
atgggeteca ggetgetetg ttgggtgetg etttgtetee tgggageagg eecagtaaag
                                                                    60
getggagtea cacaaactee aaageacetg ateacageaa etggacagea agtgacgetg
                                                                   120
agatgeteec ctaggtetgg agacetetet gtgteetggt accaacagag eetggaccag
                                                                   180
ggcctccagt tcctcattca gtattataat ggagaagaga gagcaaaagg aaacattctt
                                                                   240
gaacgattet cegeacaaca gtteeetgae ttgeactetg aactaaacet gagetetetg
                                                                   300
gagctggggg actcagcttt gtatttctgt gccagcagcg tcaaagtagg caccggggag
                                                                   360
ctgttttttg gagaaggete taggetgace gtactggagg acctgaaaaa egtgtteeca
                                                                   420
cccgaggtcg ctgtgtttga gccatcagaa gcagagatct cccacaccca aaaggccaca
                                                                   480
540
gggaaggagg tgcacagtgg ggtcagcaca gacccgcagc ccctcaagga gcagcccgcc
                                                                   600
ctcaatgact ccagatactg cctgagcagc cgcctgaggg tctcggccac cttctggcag
                                                                   660
aacccccgca accacttccg ctgtcaagtc cagttctacg ggctctcgga gaatqacqaq
                                                                   720
tggacccagg atagggccaa acctgtcacc cagatcgtca gcgccgaggc ctggggtaga
                                                                   780
geagactgtg getteacete egagtettae cageaagggg teetgtetge caccateete
                                                                   840
tatgagatet tgetagggaa ggecacettg tatgeegtge tggteagtge cetegtgetg
                                                                   900
atggccatgg tcaagagaaa ggattccaga ggctagctcc aaaaccatcc caggtcattc
                                                                   960
ttcatcctca cccaggattc tcctgtacct gctcccaatc tgtgttccta aaagtgattc
                                                                  1020
teactetget teteatetee tacttacatg aatacttete tettttttet gttteeetga
                                                                  1080
agattgaget cecaacecec aagtacgaaa taggetaaac caataaaaaa ttgtgtgttg
                                                                  1140
ggcctggttg catttcagga gtgtctgtgg agttctgctc atcactgacc tatcttctga
                                                                  1200
tttagggaaa gcagcattcc cttggacatc tgaagtgaca gccctctttc tctccaccca
                                                                  1260
atgetgettt eteetgttea teetgatgga agteeteaaa caccatttee atacceagge
                                                                  1320
attetgggte eccaetggag ggttagtetg aagggeaatg getgggettt ggaaaaceag
                                                                  1380
```

```
<210> 5254
<211> 829
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (427)...(306)
<223> similar to gi3550833 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5254
teggaattee egtgtegaeg atttegtata eagecteetg agtagetggg attacagget
                                                                       60
ccaaccacca tgcccggcta atttttgtat ttttagtaga gacagggttt caccatgttg
                                                                      120
gecaggetgg tetegaacte etgacetegt gateegeetg ceteggeete ceaaagtget
                                                                      180
gagattacag gcgtgagcca ttgtgcccag cccaacctct attttttgg tggtttcaac
                                                                      240
tttattcact gcggagctga acttaggacc attatcagaa caggatctca attctttct
                                                                      300
tactgaacca teettgegat gtactegteg aggtaacage tattgaattt gaccaagtte
                                                                      360
accagcacca gaaggaattc cgaggacaag ccaacatcca tccactgcag gacaaagtca
                                                                      420
gctgggggag aagcggcggc agtttgcgag gacgccgaat ctacatctcc cactcacctc
                                                                      480
```

```
cccctccgc cgcaggacag tgtgtccaaa cccgtcactg ccagaaaccc catcatcagt 540 ccccggcag caacagacag accacgcact gggcccgaag aggctcaggg gagcccaggg 600 caggccggct acgcacggac actaggatct accgccctg gggctgcaca gagggtctgt 660 gccgaggcgg cagcagaagt gtgtatgccg tacactcagg gcccaacccg aggctggag 720 acgccgacat caccagactc ctgggcgttc cccacccca gcagagaacg gctcggaga 780 gacgtgtgca cacttggctg ccggccacgt cacctcagac aggaaaccc 829
```

```
<210> 5255
<211> 3271
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (717)...(1897)
<223> similar to gi4322670 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5255 ctcagaccgt gcagaatgtt acattgtcgc tcactctgcc catcacgtgc cacatttgct 60 tggggaaggt acgtcagcct gtcatatgca tcaacaacca tgtattttgt tcgatttgta 120 ttgatttgtg gttgaagaat aatagccagt gtccagcttg cagagtcccc atcactcctg 180 aaaatccttg caaagaaatt ataggaggaa caagtgaaag tgaacctatg ctaagccata 240 cggtcaggaa gcatcttcgg aaaactagac ttgaattact acacaaagaa tatgaggacg 300 aaatagattg tttacagaaa gaagtagaag agcttaagag taaaaatctc agcttggagt 360 cacagatcaa aactattetg gateetttaa eettggtgea gggeaaccaa aatgaagaca 420 aacatctagt cacagataat ccaagtaaaa ttaacccaga aactgtagca gagtggaaga 480 aaaaactcag aacagctaat gaaatctatg aaaaagtgaa agatgatgtg gataagctaa 540 aggaggcaaa taaaaaattg aaattggaaa atggtggtct ggtgagggag aatttacgac 600 tgaaggetga agttgataae agateaeete aaaagtttgg aaggtttgea gttgetgete 660 ttcagtccaa agtagaacag tatgagegtg aaaccaateg eetcaagaaa geeetggaac 720 gaagtgataa gtatatagag gaactagaat ctcaagttgc acagctaaaa aattcaagtg 780 aagagaaaga agetatgaat teeatttgee agacageaet ttetgeagat ggeaaaggga 840 gcaaaggcag tgaggaggat gtggtgtcaa agaatcaagg cgatagtgcc agaaagcagc 900 ctggctcatc cacctccagt tettetcace tagegaagee ttecageage agactgtgtg 960 acaccagttc tgcaaggcag gaaagtacca gcaaagcaga ccttaactgt tctaagaaca 1020 aagacctata tcaagaacag gtagaagtaa tgttagatgt gacagataca agtatggata 1080 cttatttgga aagagaatgg gggaataaac caagtgactg tgtaccctac aaagatgaag 1140 aactttatga tetteeaget eettgtaete etttgteeet tagttgeett eageteagta 1200 ctccagaaaa tagagagagc tctgtggtcc aagcaggagg ttccaaaaag cactcaaacc 1260 atctcagaaa attggtgttt gatgattttt gtgattcttc aaatgtttct aataaagatt 1320 cttcagaaga tgatataagt agaagtgaaa atgaaaagaa atcagaatgt ttttcttccc 1380 caaagacagg attttgggac tgttgttcca caagctatgc ccaaaactta gattttgaaa 1440 gttcagaggg gaacacgata gcaaattctg ttggagaaat atcttcaaaa ttgagtgaga 1500 aatcaggett atgtttatee aaaaggttga attetatteg etettttgaa atgaacegga 1560 caagaacatc cagtgaagca tcgatggatg ctgcttacct tgacaaaatc tctgagttgg 1620 attcaatgat gtcagagtca gacaacagca agagcccttg taataacggt tttaagtcac 1680 tggatttgga tgggttatca aagtcatctc aaggcagtga atttcttgag gaacctgata 1740 agttggaaga aaaaactgag ctaaaccttt ccaaaggttc tctaactaat gatcagttag 1800 aaaatggaag tgaatggaaa cccacttctt tttttctcct ctctccatct gaccaagaaa 1860

```
tgaatgaaga tttttcactc cattccagtt cttgtccagt aactaatgaa atcaaacccc
                                                                  1920
caagetgett gtttcagaca gagttttccc agggcatttt gttaagcagt tcacatcgac
                                                                  1980
                                                                  2040
tatttgaaga tcaaagattt gggtcatctt tgtttaagat gtcctcagag atgcacagtc
                                                                  2100
ttcataacca ccttcagtct ccttggtcta cttcctttgt gcctgaaaag aggaataaaa
                                                                  2160
atqtgaatca atcaacaaaa aaaaaaatcc agagcagcct ttccagtgcc agcccatcaa
                                                                  2220
aaqcaactaa aagttqattc attagaaagg tgtcatttgt ggttttgtcc tgagagaaat
agaaaagttg ttaaagttac cttttttcct cataaaagtt ctatacaaat tggaattgat
                                                                  2280
aatctttagt caagtatcaa gtcaggatgg tggattaacc ctgtacccag aatacttatt
                                                                  2340
gttcattttg aaaagacttt gttcttttca tttttatttg ggagtctttg tgaccagaga
                                                                  2400
2460
gttttgtttt tttactgaat ttgatatgta tctcggttgg atatacattg ttttttaaa
                                                                  2520
                                                                  2580
aaatgttatt taactgttag atacagtggc ctgttgataa gcctcacttg tcttcagaac
ttgggatttc ttaaataaaa cttttaggtg ttgtctatac actgctcaat aagacacttg
                                                                  2640
agtttaaget ttteecaggg tgggaaatta ttttaeetgt eeetttttat ttatgtttag
                                                                  2700
tgatggccta gtttttctgc agggccatga tggagaaata gcactctagc cttagtccaa
                                                                  2760
tattgattta ctttcttttt ttaggtttta tgtatatgtt tgcatttttt agcattgtgt
                                                                  2820
tttgtccagt tttgtgaaaa tgttctgcta gtatgaaaga aaacattttc tatatgaaga
                                                                  2880
catttgtttt atgttaggta gettacattt teteetetge gtgtgtgtgt atgtgtgtaa
                                                                  2940
aatcagaaat ttagcatact atggaaagaa ggcatggagc acttgggttt agaggaacct
                                                                  3000
aaaacatcat agcttcattg ttccagatgt aacaggtttg aaagagctca tcgccaagtt
                                                                  3060
cttgatccac ttgcattcca ggggagtttt cttttgagta gtatgtttct tgtttgcatg
                                                                  3120
ttcctgttct ttgtggaaac tatgcatggt agcatttttg cttgctgtgt tttccatact
                                                                  3180
taagaaaaag aggtttcagt tggctgatag aatatctttt atgtaggaca aaacttttct
                                                                  3240
ggtcgacgcg gccgcggtcg acgcggccgc g
                                                                  3271
```

```
<210> 5256
<211> 8519
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (8) ... (3853)
<223> similar to gi3763972 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5256
tttcgtagac gagaggaaag taaaccgcat tcagcaagta accaccaatg gggagatcta
                                                                       60
catcateget ggtgccccca ctgactgtga ctgcaaaatt gatccaaact gtgactgttt
                                                                      120
ttcaggtgat ggtggctatg ccaaagatgc aaagatgaaa gccccttcct ccttagcagt
                                                                      180
gtcgcctgat ggaaccctct atgtggcaga cctcggaaat gttcgaattc gtaccatcag
                                                                      240
caggaaccaa gcccacctga atgacatgaa catttatgag attgcttcac ccgctgatca
                                                                      300
ggaactgtac cagttcactg taaatggaac ccacctacac accctgaact tgataacaaq
                                                                      360
ggactatgtt tataacttca cctacaattc tgaaqgtqac ttgqqcqcqa ttaccaqcaq
                                                                      420
caatggcaat tcagtgcaca ttcgccgtga tgcaggcgga atgccgctat ggcttgtggt
                                                                      480
gcctggcgga caagtatact ggctgactat aagcagcaat ggagtcctga aaagagtgtc
                                                                      540
agcccaagge tataatetgg cettaatgae etateeagga aacacaggge ttetggetae
                                                                      600
caaaagtaac gaaaatggat ggacaaccgt ttatgagtat gaccccgagg gacacctgac
                                                                      660
caatgcaacg tttcccactg gagaggtcag cagcttccac agtgacctgg agaagctgac
                                                                      720
aaaagtggag ctagatactt ccaaccgtga aaatgtcctc atgtcaacca acttgacggc
                                                                      780
```

```
aactagtacc atatatattt taaaacaaga aaatactcaa agtacctatc gggtgaatcc
                                                                      840
agatggttcc ctgcgtgtca cttttgccag cgggatggag atcggcctca gctcagagcc
                                                                      900
ccacatcctg gcaggggcag tcaaccctac cctgggcaaa tgcaacatct cattgcccgg
                                                                      960
                                                                     1020
agagcacaat gcaaacctca tcgagtggcg gcagaggaag gagcaaaaca aaggcaatgt
                                                                     1080
ttcggctttt gaaaggaggc tgagggccca caacagaaac ctactctcca tagattttga
tcatataacc cgcacaggaa agatctatga tgaccatcga aaattcaccc ttcgaattct
                                                                     1140
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                                                                     1200
catcacatat tcaccttcgg gattggtgac gtttattcaa agaggaacgt ggaatgaaaa
                                                                     1260
aatggaatat gaccagagtg ggaaaattat ttcaagaact tgggctgatg ggaaaatttg
                                                                     1320
gagctatacc tacttagaaa aatctgtgat gcttctccta cacagccagc ggcgttacat
                                                                     1380
ctttgagtat gaccaaccag attgtctgct ctcagtcacc atgcctagca tggtgcgtca
                                                                     1440
cagettacaa accatgettt cagtgggeta etaceggaac atetacacce caceggacag
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tagcacttct tttatccaag actatagtcg agatggccga ttgctacaga ccctgcatct
                                                                     1560
ggggacaggg cgcagagtct tatacaagta caccaagcaa gcaaggcttt ctgaggttct
                                                                     1620
                                                                     1680
ctatgatacc actcaggtca cattaacata tgaagagtct tctggagtga ttaagacaat
acacctgatg catgacggat tcatctgcac aatcagatac aggcaaacag gacctcttat
                                                                     1740
tggacgccag attttcagat tcagtgaaga aggccttgtg aatgcacggt tcgactacag
                                                                     1800
                                                                     1860
ctacaacaat ttccgagtca caagcatgca agctgtaatc aatgaaaccc ctttgcctat
agatetttae egatatgttg atgtetetgg cagaacagag cagtttggaa aatteagtgt
                                                                     1920
aattaattac gatttaaatc aggtcataac tactacagtg atgaaacaca ccaaaatctt
                                                                     1980
                                                                     2040
cagtgccaat ggacaagtca ttgaagtcca atatgaaatc ctaaaggcaa ttgcctactg
gatgaccatt caatatgata atgtgggccg catggtaata tgtgacataa gggtaggagt
                                                                     2100
agatgccaat ataacaaggt acttctatga atacgatgct gatgggcaac ttcagactgt
                                                                     2160
ttctgtaaat gacaaaaccc agtggcgtta tagttacgat ctgaatggaa acatcaacct
                                                                     2220
cttaagccat gggaagagtg ctcgtcttac tcctctccga tatgacctcc gagaccgcat
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caccagatta ggagaaattc agtataaaat ggatgaagat ggctttctga ggcagagggg
                                                                     2340
aaatgatatt tttgaatata attctaatgg cctgctgcag aaagcctaca ataaggcttc
                                                                     2400
tggctggact gtgcagtatt actatgatgg gcttgggcga cgtgtcgcga gtaagtccag
                                                                     2460
cctagggcag caccttcagt tcttttatgc agaccttacc aaccccataa gagttactca
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                                                                     2700
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                                                                     2820
tggcagatgg acaacgccta atcatcacat atggaaacag ttgaacctcc ttcctaaacc
                                                                     2880
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                                                                     3000
acctggattt cccaaacctg aattagaaaa tttagaatta acttacgagc ttctacggct
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                                                                     3180
tgatggacgg tgccttgaag gagggaagca accaaggttt gctgctgtcc cttctgtttt
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cctacatttt accatagagg ggagggacac tcactacttc attaagcttg ggtctctgga
                                                                     3420
ggaagacctg gtgctcatcg gtaacactgg ggggaggcgg attctggaga atggtgtcaa
                                                                     3480
tgtcactgtg tcccagatga cttctgtgtt gaatgggagg actagacggt ttgcagatat
                                                                     3540
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                                                                     3600
aaagaatcac gtgttggaga ttgccagaca gcgcgcagtg gcccaggcct ggactaagga
                                                                     3660
acaaagaagg ctgcaagagg gggaagaggg gattagggca tggacagaag gggaaaagca
                                                                     3720
gcagcttttg agcactgggc gggtacaagg ttacgatggg tattttgttt tgtctgttga
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gcagtattta gaactttctg acagtgccaa taatattcac tttatgagac agagcgaaat
                                                                     3840
aggcaggagg taacaaaaat atctctgcct ttgcgtcacc aaagactgcc tgtttttaaa
                                                                     3900
acataaaatg gtttattgta ttggttttct agatcagaac tctgtatatg taaatatgga
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ggaaaaacat atccaactgc ctttcaatgt gacggaagat ggtattttaa tattgtttgt
                                                                     4020
ttaaactctt taagaaatga cagagatttt tagttcttgt gtggcagtat tcaaaataac
                                                                     4080
acaaggtaga actcaaacag ctaaaaacag ttttcagaaa gcaccacttt caatttgccg
                                                                     4140
agccatgcat atgttccaat atccagaaag aacccaaggt tctctatctc tattgtgaga
                                                                     4200
```

```
4260
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gtatetgaaa ettgeettte gaaagaetge cageeetttg aegtttteea gatetgttat
                                                                    4320
aggaaactta aaaacaggtg taaaatgtct tcagccacca tctcctagag tgaggaccca
                                                                    4380
                                                                    4440
attgcccttc cttcttgatt attcctcctt gcttgttaaa gtaaatgcca tattgttgtg
ctgtgttttg gcgtgtggtg gctgggttct gtctaccatg cttccctgtg ggtgtggtaa
                                                                    4500
ccagactgta tagccgctat ttgctcgtgt gtacatgata ccaaagcagc tggccagcgt
                                                                    4560
gacctetete acacgacetg ttttgactca attttttact aaaagttgtt cagetgtatt
                                                                    4620
ggtatcatgt aaacatagct tttattaacc tgggtaggaa tttctcattt atatatagga
                                                                    4680
tgtgttttgg tcatagtttc acattagtga ttcagtatct atacactgac ccaatggttt
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tgtgcacatg aacggtaatt tacttaaaag tatgattctg gtacaaaaac aaacaaaggc
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tttagcaggc atacgtgtct gggatgccga tacatacatt aactactact gcagaaattc
                                                                    4860
ataagagcca aaaccttaaa aaaatagacc tgggtactta agtgaaagta ctaaagggaa
                                                                    4920
                                                                    4980
gaccagacca aacatcacag cagttgctgc ccacattgtt tcagcccact taggatttat
ctttccaaat gttacaattc tgtattggaa catctcccag ccatcttcaq ggaaatcgga
                                                                    5040
tccagtaaat cctttccaac cgaaaacatt tcaactaact atagagaggc agactcattt
                                                                    5100
ttactaaaat aatttataca gttagttatt ttcgttctcc gtacttaccc atttatcttt
                                                                    5160
atttaatcgt ctctactgcc taggaaaata actattttcc aggacgggtt atttgttctg
                                                                    5220
cgatcattta aaatttggag aaaggtcagg attagtgtta atatcagctg cagtttctca
                                                                    5280
atctctagga atcctgcagt aaaacaagcc ccttggtgag ctggaagatt tgtgcccagt
                                                                    5340
                                                                    5400
gacaaagaga tagtttgtaa aatgctgtgt aattgtaagt taccacaaat gaaaatacat
gacagcacaa tgtggcccgt agaaaattcc cctgagccag cttctgcact ttcatcaccg
                                                                    5460
aatctgaaca tttgctatgt ctgaaggcaa atttatgatg gaatgttagt ttggattctt
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tecagatget acctaaatge agtgtggggt cattgeettg etttgegatg acagtttett
                                                                    5580
tgaaaatatg caaagtcata agctcatgtt aaggtttttc aagagtctgc ctcctactac
                                                                    5640
                                                                    5700
acaaaggaaa gcaagggaaa ggaaatgacc ctggcaaaca gtagggaagg gtgtattcaa
acatttcatt ttcaaaacct tegggttaga ataccactta cacatgtatt etgagagaca
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gaattcatga ggaactcatc tctctttata actggaaaca caccaqcttq atatattqct
                                                                    5820
aatccatact aaaatcatat tattgggttt tttctgaatc aggcctgtat taatggtaca
                                                                    5880
gtatttattc agaatggaat tctaaaatta ctaacaaact tgttgaaaat ttgaatacct
                                                                    5940
ccacaccaac ctaaaaatgg accttaagtt cctagaacct ctgatgttct tttaaattaa
                                                                    6000
tggaaaaata atttgtgaac tgtatataga gagtgcattc ataaatgtga ttatgtattt
                                                                    6060
tatcacaaat ccaaaatgtc aatattagag tctattttgc ttatatttta agcaattata
                                                                    6120
cgtttttgca attcattgat gatgtatcat tttcaaactg ctttaaatat ccattagaaa
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6420
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aaattattga aagaacaatt cgtttgcatt tcctgatgaa agtaaaagca tttttcaqaq
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                                                                    6780
cttttctgtt ttgttttgtt ttcactcttg cactacagtc tagagatcca aatgaactga
                                                                    6840
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                                                                    6900
tgattagaag catgactcct gaaggaaagg gaaataaatc tcaattcata ctaacttgca
                                                                    6960
acaaaacact tttaccatat aaataagtat atgatttatt tttaacccaa aaaatgtata
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aaataagtgt gtcctttact gtcaatttat cgagaagatc tataatatat agactacata
                                                                    7080
tatataatat atacaacata gccaaatgta tgaaaacttg acaatgtata atttggaatt
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cacatgetae etatgtagae aggtatgaaa ttaagttata atttteatga gacattttea
                                                                    7200
teactgttga cacagtttca ageatteeat catgttattt tgactetttt tetttttt
                                                                    7260
ttctttaaaa atatatttt aactagacca ggccccacta taatatcact taagagagtc
                                                                    7320
agggcaaagt ttttgcattt atgaagatgt gttcatgtaa gggtgattgt aatggagttc
                                                                    7380
attggtaata gaagcaaaag tacagtaacg aagtattgaa aagaaaattt tggagacatt
                                                                    7440
ggagcatatt atatatagct tgtggaaaga cataaggcta cagatggaat ggaacattco
                                                                    7500
tgttttcttg aagaaattca catacacata gctgacctga ctagtacttc agctcttcca
                                                                    7560
cagcetteta taaaggttet ttettetgea aagaaaacaa aacaaaacaa aacaaaacaa
                                                                    7620
```

```
aaaaaacaaa aaaagcgcaa aaaacaaaaa aacaaaaaaa agcaaagtaa aatttaaaaa
                                                                     7680
                                                                     7740
tacaqaaaac aaacaacaaa aaagaattca accataaata gtgactatta ttttcagtgt
qtccttcatq tgaaaqctat taaqgaccaa atatactact gttcataaqa aqaaattact
                                                                     7800
ttctaaacag taactgaaaa tacttagagt taaacttgct gtggattttg tcttggcagt
                                                                     7860
tgtcatctta cattatttgt caaaggaaat gtgtttggca gttaaaaatc tttccttaga
                                                                     7920
tttagtqgtg gactttaacc tcttaaataa atgttagtat atcagattgt gtccttgaaa
                                                                     7980
aatattttac ttgtatgaat catgacaacg tctaaatctt tactattctt ctggcaaaag
                                                                     8040
catcagtaag aaagaaggcg aaaaagagaa gtatagcctt tatgtcagaa aaacattctt
                                                                     8100
tttagctgct tactttctca tgaaaagtaa agatgtttac agtgtatgcc ccaagttttc
                                                                     8160
cagtttcctg taataaccaa caggtaagag gttcctaatc catattgaaa attgtgttat
                                                                     8220
aatggtctga gcccatgttg cctaggaaac aataggttcc caaatttgta aatccctgcc
                                                                     8280
teteetgtge etgaaaagtg acetggatae tgtaacaggt teeatgttee tetggetgea
                                                                     8340
gttaaatggt cttttgcatt ttgctctggc tttcaggcca gaagcatgca tttttctaca
                                                                     8400
agagcatcac aacaacatgc tgtaaatatt taaagttaaa cattatgtgt tgatatttga
                                                                     8460
aagaaaagca ctttgaatat ttcattttta aaaaataaaa ttgccaatga aaaaaaaaa
                                                                     8519
```

```
<210> 5257
<211> 932
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (12)...(881)

<223> similar to gi495144 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

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<400> 5257
ggcggaatte ggacatgate etetecgeet etegagataa gaccateate atgtggaaae
                                                                       60
tgaccaggga tgagaccaac tatggaattc cacagcgtgc tctgcggggt cactcccact
                                                                      120
ttgttagtga tgtggttatc tcctcagatg gccagtttgc cctctcaggc tcctgggatg
                                                                      180
gaaccetgeg cetetgggat etcacaacgg geaccaceae gaggegattt gtgggeeata
                                                                      240
ccaaggatgt gctgagtgtg gccttctcct ctgacaaccg gcagattgtc tctggatctc
                                                                      300
gagataaaac catcaagcta tggaataccc tgggtgtgtg caaatacact gtccaggatg
                                                                      360
agagccacte agagtgggtg tettgtgtee gettetegee caacagcage aaccetatea
                                                                      420
tegteteetg tggetgggae aagetggtea aggtatggaa eetggetaae tgeaagetga
                                                                      480
agaccaacca cattggccac acaggctatc tgaacacggt gactgtctct ccagatggat
                                                                      540
ccctctgtgc ttctggaggc aaggatggcc aggccatgtt atgggatctc aacgaaggca
                                                                      600
aacacettta caegetagat ggtggggaca teatcaaege eetgtgette ageeetaaee
                                                                      660
getactgget gtgtgetgee acaggeeeca geatcaagat etgggattta qaqqqaaaqa
                                                                      720
tcattgtaga tgaactgaag caagaagtta tcagtaccag cagcaaggca gaaccaccc
                                                                      780
agtgcacctc cctggcctgg tctgctgatg gccagactct gtttgctggc tacacggaca
                                                                      840
acctggtgcg agtgtggcag gtgaccattg gcacacgcta gaagtttatg gcagagcttt
                                                                      900
acaaataaaa aaaaaaactg gctaaaaaaa aa
                                                                      932
```

```
<211> 2536
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (23)...(978)
<223> similar to gi3372651 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5258 gaatteeegg gtegaetatt tegtetttga gggteatace teeaaagtta aetgeeteet 60 120 ccgctgctat aatgttaaga gccgagagtg tgtggagcag ttacagctgg aagaccgggt 180 cetetgeete cacagtagat ggegaateet etatgeggga etggeaaatg qeactqtqqt 240 caccttcaac ataaagaaca acaaacgact tgagatcttt gaatgccatg gccctcgggc 300 agtcagetgt ettgetacag etcaggaagg tgeeegaaaa etgetggteg tggggtetta 360 tgactgcaca attagtgtac gcgatgcccg gaatggactg ctcctcagaa ctctggaggg 420 ccatagcaaa accattettt gcatgaaggt ggtgaatgat etegtgttea gtggeteeag 480 tgatcagtca gtccatgctc acaacattca cactggtgag ctcgtgcgga tctataaagg 540 tcacaatcat gcagtgactg tggtgaatat cctaggaaaa gtgatggtga ctgcttgcct 600 ggataaattt gttegtgtet atgaattaca gteteatgat egattacaag tttatggagg 660 acacaaagac atgattatgt gtatgaccat ccataaaagc atgatttaca ctggctgtta 720 tgatggcagt attcaggccg tgaggcttaa tctgatgcag aattaccgct gttggtggca 780 tggttgetet etgatatttg gegttgtaga teatttaaaa caacaettge tgacegacea 840 cactaatece aaettecaga etetgaaatg tegetggaag aaetgegatg etttttteae 900 tgctaggaaa ggatccaaac aggatgctgc aggacatatt gaacgacatg ctgaagatga 960 cagcaaaatt gattcatgaa gttttttgcc tcccacgttg ggaagtcatt agttgaacta 1020 ttttcacatt ggccccccac acaggccact ctcttccctt tcttggtgaa gtaaggaagg 1080 agaaagtggt tactagccag gcatacccct agcataagtc tgggcagctc tatgggatga 1140 taaattacac ttttaagttc ttgctggagg ttttaaatag atttagacaa atgttaagga 1200 accatactte tetgggacag catggcatat agtgatatat getatttgeg ttetecagat 1260 gtttattgaa gatacagatc ctaattggtt acccagtttg accctaatca tatgtatatt 1320 ttattgattt cagtttgcaa tttttaattt atgttcttat gatggtttaa acctatagtc 1380 aggettttaa gtacaagttt gtttaagtge cagaetttga ggatcagttt taatttetee 1440 attigtaata getgggtatt taaactggaa geaaatagtt ttettetta acaattatgt 1500 gcagtgtgtg tcactgtttt cttgctttat agatagaget ggctttaagt gctaaaggac 1560 acagtagatt tttgacaaac agtggctgct ctgctgacta tcttttagga attcaggaag 1620 caaatcacat agtgacaagt ccttacagac accacttcta gtaaatctct gtaaatgtgg 1680 atagaaaget cagtgtgagg cagtgegtag acetaaegte taeetttaca tetgetgttg 1740 aacctgggca ctacctgtta cagatcctgt caggctgttg aactggaggt gtacctttat 1800 cttcctttct agtgtctgac cctgcaagcc taatgttggt ttgaaccctt ttggtttgtt 1860 cagitgccag cetecatete teccaetgta tggccgtgce tagaccgatg geagecateg 1920 aatatteete tgggeteaeg gggtgtttte caceceetg cageaactaa gatggtgggg 1980 gagagggggt tagaataaag catctgaata cagttttcag gacctcaagc agacttccta 2040 gagacttgtt tetgagaeag ttetttgeet teaetteeet getagetggg aaagaagagt 2100 ggagcagaga ctctgcctgg ccactgagaa cagccaaatt cacaaaccct cagtggggct 2160 ttgtttttgg attttctccg gactcatcag taaacctgta gaagtgtcgc tttccagcct 2220 tttgtttctg gatceteaaa acteagaaeg tggeegggeg tggtggetea egeetgtaat 2280 cccagcactt tgggaggctg aggcaggcag atcacctgag gctaggagtt gcagaccagc 2340 ctggccaaca tggcaaaacc ccgtctctac taaaaataca aaaagccggg cgtggtgggc 2400 gcctgtaatc ccagctgctc aggaggctga ggcaggagaa tcgcttgaac ccgggaggca 2460 gagattgcag taagctgaga tcgtgccact gcactccagc ctggtgacag agtgagactc 2520 cgtctcaaaa aaaaaa 2536

```
<210> 5259
<211> 4201
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1394)
<223> similar to gi5911845 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 5259
atgttacgac gctaccgccc tgacatcacc agttgccatg gtagcaccgc cgagagtaaa
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ggaggggtgg tgctagacgt ttcgggcaga gctcggccgc tgcggaggac aaggaactct
                                                                      120
ccctctccca ctagtctgac ttcttccaaa atgagcggcc tggatggggg caacaagctc
                                                                      180
cetetegece aaaceggegg cetggetget eeegaceatg ceteaggaga teeggacega
                                                                      240
gaccagtgcc aagggctccg tgaagaaacc gaggcgacac aggtgatggc gaacacaggt
                                                                      300
gggggcagcc tggagaccgt tgcggagggg ggtgcatccc aggatcctgt cgactgtggc
                                                                      360
eccgegetee gegteecagt tgeegggagt egeggeggtg cagegaceaa ageegggeag
                                                                      420
gaggatgete cacettetae gaaaggtetg gaageageet etgeegeega ggetgetgae
                                                                      480
agcagccaga aaaatggctg tcagcttgga gagccccgtg gccctgctgg gcagaaggct
                                                                      540
ctagaageet gtggegeagg gggettgggg teteagatga taeeggggaa gaaggeeaag
                                                                      600
gaagtgacga ctaaaaaacg cgccatctcg gcagcagtgg aaaaggaggg agaagcaggg
                                                                      660
gcggcgatgg aggaaaagaa ggtagtgcag aaggaaaaaa aggtggcagg aggggtgaaa
                                                                      720
gaggagacac ggcccagggc cccgaagatc aataactgca tggactcact ggaggccatc
                                                                      780
gatcaagagt tgtcaaacgt aaatgcccag gctgacaggg ccttccttca gcttgagcgc
                                                                      840
aagtttggcc gcatgcgaag gctccacatg cagcgcagaa gtttcattat ccagaatatc
                                                                      900
ccaggtttct gggttactgc ctttcgaaac caccccagc tgtcacctat gatcagtggc
                                                                      960
caagatgaag acatgctgag gtacatgatc aatttggagg tggaggagct taaacacccc
                                                                     1020
agagcagget geaaatteaa gtteatettt cagggeaace eetaetteeg aaatgagggg
                                                                     1080
cttgtcaagg aatatgaacg cagateetet ggeegggtgg tgtetettte caeteeaate
                                                                     1140
egetggeace gaggeeaaga ecceeagget catateeaca gaaaceggga agggaacaet
                                                                     1200
atccctagtt tcttcaactg gttttcagac cacagccttc tagaattcga cagaattgca
                                                                     1260
gagattatca aaggagaact gtggcccaat cccctacaat actacctgat gggtgaaggg
                                                                     1320
ccccgtagag gaattcgagg cccaccaagg cagccagtgg agagcgccag atccttcagg
                                                                     1380
ttccagtctg gctaatctct gtcctgtgag aagcttctgc acaagtttcc ttaccacctc
                                                                     1440
ctcttggacc tatgcttggc caacagcatg cagtetteca tetgetttet etteatactg
                                                                     1500
tggattatet ttteetttgg ttetaaatet teagtaateg gttgeaagat tgttggetta
                                                                     1560
cotgootgtg coattottoc totgggcott catgotttto tgcattgtgt taacatgttt
                                                                     1620
caagtgcatg gccttctacg gcttctatgc caagcgtatg atactataga tatagtgtac
                                                                     1680
catactgeet ttetttgeat ggettggaee etatetgtga ecatgetett eteceaattt
                                                                     1740
aagtggttct gtaccacaaa gaatcttgat acattttcac aaataactga ttgggcttca
                                                                     1800
tactttatgc tggctgtgtc ctgataccca tgtacttatg gtaagctatt tgggtattac
                                                                     1860
cactgcaaga caaaactgat atcttaaccc ggccatcaac ccaaattgga cattccagac
                                                                     1920
taccaccaac tggatcccag ctgccttcct gggcttgtgc catccaccct actggttatc
                                                                     1980
tgatagaaca agctggtggc tgatgggtga ctgctaggcg tgactgaggt aatagatgaa
                                                                     2040
aagtgttcta tgttatcaca ttggttttcc tgtacctttg gttactctac gtcatggacc
                                                                     2100
agetgetggt gagtatgaag cetgtgetat ageceaecce tactcactet cacettetgg
                                                                     2160
ttgaactttg cttaggccac cattgtctgc ctcatcagga actatctgta gacgtagctc
                                                                     2220
```

```
ccagggagct cacagcaaca ccccctaccc ccaggatggg cagtaatatg tgacagagcc
                                                                     2280
caaagcaagg ctgggaacgc agtcccttcc agcttagtct ttctgactcc tagccaacaa
                                                                     2340
accatectta atgtgageaa ettetttagg cattteetet ttteecegee tgeacceaet
                                                                     2400
                                                                     2460
ctgaacatga caaaagttgc cagagttggg gcattgagga agagatattt ctggaatgtg
agacttgtta tgcctctgtc tctttctctc cctcctcctc ccctctccct ccccctctcc
                                                                     2520
ctcccatccc ttttcttccc tttcactctg aagcagtttt agcttattaa cagaaaacaa
                                                                     2580
aactggcaaa gcaqqctttt tgtttaattt gctctttccc tgattgtgtt cagagagaaa
                                                                     2640
ggttatgatt aaatgggctc cagatctctt attgccctta ttcctccacc ccacttcttt
                                                                     2700
tagcaaggtc tgaaagtttc aaagggagac ctataggtta attgtttagt tataggcagt
                                                                     2760
                                                                     2820
gttaaattag gcagattttg acatatttat ctttttaccc catccattct accaaaacct
gtgtatttct tgagttttta gtttgagaag ctggaaagag agagaagggc ctcacagtga
                                                                     2880
tgggttcagg acgggtcaaa ggcaaaggcc tttgtgatgt gagcaaaggc aaccaaaact
                                                                     2940
                                                                     3000
tageeteact ecaettttet aaagatggaa attettttt gggeettgga etgettetag
ggtagcattt tgtaggtcac tcttctcctt tgtactattt tgtttctgcc ctgatgtccc
                                                                     3060
ttgggtetee atectaetge etggetttet tggeeeteat tteteagett etgeatttee
                                                                     3120
                                                                     3180
ttccctgctc ctaacaaatg aagaagcagg ctgcagcctg cattgtggaa gatctccagc
ctccttgtag gggataaggg gatgtgcagc atctgtgtgg attttcacgg acaagttcca
                                                                     3240
gtaggtggga cagtgatgcc gtcaaggctt agttatgatc atgtgtggtg ataaagacca
                                                                     3300
                                                                     3360
tecaccatea ccettttece etttggtttt gaaggeettg ccetaageta cetgagggtt
taggaggtet gaacacacac agtggagagg ttaatctagg ttgggaaact gagtaaaagt
                                                                     3420
ccagagcagg aatgagcctg ctgtggcgtg ggtttggaaa ggctcacagg aaagaacctg
                                                                     3480
caggatcagg ggtgggaggg gaggcccctg aggtgctctc cagggaagag gggctggggt
                                                                     3540
ttaaatagca tgcttggagg aagattttcc ttcaattttt cctaagtcct tgaattcacc
                                                                     3600
                                                                     3660
agtagatttt tgtaaacaaa atgtaagtcg atgttttctc tcaattatcc taggagtgac
                                                                     3720
ctttatatgt gtggaagatt aatggtatat gctccttatg tcactgtttt tgagtaaaat
ccatttectt tetetgttte agectatgae aaaattgatg tttacaggee tgetttttge
                                                                     3780
ttataattga caacatgtgc aaaaatacca aatttgtgtc ctgtgcagta tgaagaattc
                                                                     3840
agtgaatatt cattaatgta ttagcttgtt ttgctctctg ttcatatatg gctctattct
                                                                     3900
                                                                     3960
tagaaatata atttgaatgt gatctttcaa tagtctgaat attttacaaa ttatagctat
gtcttgtgaa aataacctca aaaagaaaaa tacgactctg ttgtcttact tgatatttct
                                                                     4020
tgccctagta atgtacttga catttatgtt cctaagcagt gtaagtacta gtagaatttc
                                                                     4080
tetgteaaac teaatgatea tttagtaett ttgtettete eeatgtgett gaaggaaaaa
                                                                     4140
taaagtgtca ctaccgtatt tcttgttttc atcaaaaaat aaaaataatt taaaaaaaaa
                                                                     4200
                                                                     4201
```

```
<210> 5260
<211> 1385
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (217)...(486)
<223> similar to gi643 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5260
aattaataca ttttgtgctt ttattcagct catcttgtgg taaaaggagt ttgctcaggc 60
aatgaattat gtcagattag gaataggtct tgaccgatct acagatatgc agtattgatg 120
gaaaaaggat ccctacttag aatagttct ctggagtgag tataactgcc tttattaaaa 180
```

```
tgtttctatc tcttgtaaca atttcataat tgtatagttt ataggcaagc aataaacagc
                                                                      240
aagatgtttg aggtggatat gaaaattgct gaaatgcatg taaaaagaaa gcaactccat
                                                                      300
caactactac ctaatcatgt gcttcagaaa aagaaaaagc attcaacaga aggtgtcaaa
                                                                      360
ttgacagete teaatgacag cageetegae ttgtetatgg acagggataa cageatgtet
                                                                      420
gtgccttcac ctactagggc tacgaagacc agtccattga acagttctgg cagctctcag
                                                                      480
gggtaaggaa aaagagggaa atagaagtgg aggggctgtt tgctaaatca atcagataca
                                                                      540
ttctcttttt gctattaaag tcatctattt agaatgttat tttcattcca tctactaatt
                                                                      600
tttttttaaa tagcaattta attcccaggt ttggggatag tactttttgg ttttgtcttg
                                                                      660
tcatacttaa cattttattt ttgagactga taatgtcttc agtcagatgt gaatgaatgt
                                                                      720
tagcacataa cccctccaaa ttcatgtatt tagatagcta ctgctacagt gcactgtatg
                                                                      780
gtgtgctgat gagaacagac aaaaggaaca aaaccacctt tctgtcccag agctgcttat
                                                                      840
acctttgtaa cagggaatgt gtctatgata gttagggaaa cctgttttag aagagctaga
                                                                      900
tatctgtcta acatttacag cagttaaaat tttaaaaaatt tattattatt ttgagaaatg
                                                                      960
gggtetgget gtgttgttta ggetggeett gagtteetgg atttaagega teeteetaet
                                                                     1020
teageettet gagtggetga gactacagge geatgeeact geeetgggta tgaageagtg
                                                                     1080
aaaaattttc agccaggtgc agtgactcac acctgtaatc ccagcacttg gggaggctga
                                                                     1140
ggtggtagga tcacttgagg ccaggagttc aagaccggcc tgggcaacgt ggtgagactc
                                                                     1200
ccatctctag aaaaaagtaa aagaattagg tgtggtggta tgcacctgta gtcgtggcca
                                                                     1260
ctcaggaggc tgaggtggga ggattgcttg aacctgcaag gttgagacta cagtgagctg
                                                                     1320
tgatcccact gctgttgccc ccagcctggg caaccagagt gagaccctgt cttaaaaaaa
                                                                     1380
                                                                     1385
```

```
<210> 5261
<211> 455
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(58)
<223> similar to gi2224405 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5261
60
ttaattgete agaetgtget agagaataeg taccatgaaa tacatatatt teataaggtt
                                                              120
cagttacaaa atggattgtt tcaaatggca atttcttaca ctaacctgat tatgaaaaaa
                                                              180
agaagtetgt atcatetget tecaagtetg ttatgteeaa atatattita attatgeatt
                                                              240
tattttgcta ettttataaa tattagagat tteaeettaa attatttttg taaetagtte
                                                              300
tagaacatgt tttccaatta ttatttttct aatggagaca tataattgac ctatgtttat
                                                              360
gcatatatgt tctctacaca gtgaaacttt ttttaaaaaag aatagtaaag aaaatgcgga
                                                              420
agctctggct ctccaaggca aagtcaaaaa aaaaa
                                                              455
```

```
<210> 5262
<211> 399
<212> DNA
```

<213> Homo sapiens

<220>

<221> misc feature

<222> (208)...(283)

<223> similar to gi2204218 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5262 tttgtgctgc aaccaggtac tgtgatttct cacctagttt ccatagctct tgtgaaggtg 60 ttttcgtgca tggatagtgt tcaaattgat gtttctgtta ggggacaatc actggagagt 120 cctattcttc catcttattc tgcccctctc ctccaaaaag gtcaacttgt aactgctttt ttcaaaccaa tattcaatca gtttatgaac cacatgagtc agaatcatca gaatatccca 240 ccaacaaata cagagagaag atcaagatcc tgtacaatac tataaatata tatttatgtt 300 ttcacagtca cccagtgtat tgtaatgtat acttgaaaaa tgttataact tatgaaggac 360 agtttctgat gagagtcttt ataagatata agacttaat 399

```
<210> 5263
```

<211> 2255

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1881)...(1012)

<223> similar to gi5912357 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5263 tttttttttt ttactttcat taagtgctca tttattattt atgtagaaaa gtttaaaatg 60 ctcccaatga gttcatcagt tatcaagctc acatgagtta ggacacaatc acctttggtt 120 tttcatctca taataagtca gcaaaagttg acatttatct tactagacat ttcccattag 180 ccctaactga aacagatatc aaacacccta gattctcttc agtgcaaagt atctggagtc 240 acagcaattt tagagacaag ctagtgcaat ctagtaattt tcatagtcgc agaaactgag 300 gcctagaagt gatttgtaca tgtgagcagc tagaaccagg acaagaactc cagaacctgg 360 gaccacgtga gagtaaaaag aaagggcacc gagtacagga acaacaactg acacatttca 420 ggtggaaaaa acaagtcaca taactgaaaa ccaaaatcac agttacataa ctattttata 480 ttagcttcct acatataaag tataaaaact cagctataca tgttatgaaa ttgtacaaac 540 ttacacttgt ttatggccta aaatttgtat aaggacacac ttatacagat ttcataaaca 600 atggccattt ttagaaaaag ttatatttgt ccctgaacat aatattcata atttgctttc 660 aaaacaaact cgaagtaagg attggacttt aagcttccaa gctgatccgc ttgtagcagg 720 tettteacet eeggtaagta eteactgage tgaatgeeat ettttaaaag tttetgtaag 780 atcttcacaa atatactgtc tttagatact tcaattggat catctttgcc atcagaactg . 840 gaccagttat cictotgaag agotttgcaa aggatttcca gttttagatc atttatattt 900 atatettett ceteateaat atatteeaac aagteeaaag etttettgaa ateatattea 960 ttagctcttc tattttcttc acagatatat agaccaatga gttgtggtgc agtcaatact 1020 ggcatcgcac tgagatttag ctgtttctcc gccagcagct gttcaggtag ggtctcctga 1080

```
1140
tgcagtagaa agegeteetg etcagecatt tetteaattt tttettgtag catateetet
                                                                     1200
gaaaagtctg aagctaatgc agccaattta ctcaagccaa gaagggtttt cttctttgca
                                                                     1260
aaqtaacqaq tttccatatt tgccaaaccc agaagtgttg catgagcctt ttctaattct
tggctattaa tttcatgtaa ccagctgaga/tgttcatgag cttgcaaaaa atttgccaac
                                                                     1320
tgtccatgct gagaaatggg ctgagataat aatttgcctc gctttccttt ctccagatac
                                                                     1380
                                                                     1440
caacggaaga gaaagtctga aaaattctga tcagcaaact gggtcatgta gcgctggagt
cggctctggt tgtcagtctg ctcacacatt tgtaccaata tatcaaagtc acagtatttc
                                                                     1500
                                                                     1560
tetgetagag aageageeea caggtactgg cetagtgaaa gaagaggaga taagagatet
                                                                     1620
gatettttet gtaggtatte cateteeaga ttgteatate ttteeegatt actggattta
                                                                     1680
tccacagact taagctgaga aacataacca tccaggaagc aatcgatcag ggctaccagc
tgctcggtca cgatgtttcg gaggttgctg tctgcctgtg gataagccac cttcaggaca
                                                                     1740
ateteatget ggegtattat tacegttegg atgecaceag gaccaettgt tgeegteeat
                                                                     1800
ggaacatatt caggttettt ttetagtgat tettetette tatacaaaga gtttetattt
                                                                     1860
tggcgataat gactagcagc ctgcagcata tcctggaaaa aaagttaatg tgttatcaca
                                                                     1920
                                                                     1980
tgcaaaaggt gatggatcac agtatttctg aagataattt aagacagcaa agtaaattag
taagaaaaaa tactcagggg ccaggaatgt tggctcacac ctgtaatccc agtgctttgg
                                                                     2040
gaggetgagg taggaggatt geteetagee tgacaacata gtgagaeeee atetgtacaa
                                                                     2100
aaaattttta aaattacctg ggcatcgtgg cgtgcaccta ccgtcccagc tacttgggag
                                                                     2160
actgaggcag gaggactgct tgagcccagg aggtggaggc tgcagtgagc tataatcaag
                                                                     2220
ccactataaa cacgaaatcg tcgacccggg aattc
                                                                     2255
```

```
<210> 5264
<211> 719
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (599)...(168)
<223> similar to gi1256001 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5264
tttttttttt ttccaaggac aagagtgtct ttactggagt tgggactggg gcctctatag
                                                                       60
gggcttctgg tttctgggct gtaggtttgt gaggtgtggg atcttaagtc aaaggtgggg
                                                                      120
gactagggca gggtatcaga aggtgatgtc atcctcgtac agggacagca gcagcaggac
                                                                      180
ggtccagccg cccagcaggc ccacgttgtg cagcaggaag aggagccagg gccgcgggtc
                                                                      240
cegtaettte aacategeeg ggageatgte geagagtget aegtagagga acaggeeggt
                                                                      300
ggccactgcc aggatecagg cotegetete etegetgaet ecaacegega gtgccaegta
                                                                      360
gagaccagcg aaggccgtga gcgcggaggc caggttcagc agcagtgctt ggcgcacgga
                                                                      420
cageceegeg tgeageaagg eggegaagte ceeeageteg tgtggeaaet egtggeagaa
                                                                      480
cacggccagc gaggtggcca gcccggtctt ccaggaggac gcgaaggcgg cgcccacggc
                                                                      540
cagcccgtcg gcgaagttgt gcacggcgtc gcccagagtg atcatatagg gcagtagcct
                                                                      600
caactetggg etcagtetee tgggetcagg gttcagcage tecgggetet ceteegecae
                                                                      660
ctgggaggag ccttgagtaa gtcctcgaaa tcgtcgaccc gggagttccg gccgagtgc
                                                                      719
```

```
<210> 5265
<211> 1794
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (574)...(1015)
<223> similar to gi3157950 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5265
                                                                     60
gaggagetga ggtteggtee eegeegggga ggtegggaeg ggeagggget gaggaeeeeg
egecagettg ggagecetgg agttetggeg ggagggaage tgteaaatgg aageeggtag
                                                                    120
180
egeogeetet teettteeag eetceegeee tegtetgett eeggeeetgt ggeetggtgg
                                                                    240
ggetetgeag geteectegg gagtggteet tgggeegtgg eeeetetggg aggeetgagg
                                                                    300
gageteaate etggtageaa eacceetgaa tteetggtgg tgaaaggatg tggceecagg
                                                                    360
acceateceg gaaggaggtg etgaggtttg cagteagetg cegtateetg actetgatge
                                                                    420
                                                                    480
tgcaggccct cttcaatgcc atcatcccag atcaccatgc agaagccttc tctcctcctc
gcctggcccc ctcaggcttt gtggaccaac tcgtggaagt attatgccta cacccaattc
                                                                    540
tgtctgccag gctcagcccg ccccattcct gagcctttgg tacagttagc tgtagacaag
                                                                    600
ggctaccgga ttgcagaggg aaatgaaccg ccttggtgct tctgggatgt tccactaata
                                                                    660
tacagctata tccaggatgt ctactggaat gttggctttt tgaaatacta tgagctcaag
                                                                    720
caggtgccca attttctact ggctgcacca gtggctatac tggttgcctg ggcaacttgg
                                                                    780
acatacgtga ccactcaccc ttggctctgc cttacacttg ggctgcaaag gagcaagaac
                                                                    840
aataagaccc tagagaagcc cgatcttgga ttcctcagtc ctcaggtgtt tgtgtacgtg
                                                                    900
gtccacgctg cagtgctgct gctgtttgga ggtctgtgca tgcatgttca ggttctcacc
                                                                    960
aggtttttgg geteeteeac teetattatg taetggttte eageteactt getteaggat
                                                                   1020
caagagccgc tgttgagatc cttaaagact gtgccttgga agcctcttgc agaggactcc
                                                                   1080
ccaccaggac aaaaggtccc cagaaatcct atcatgggac ttttgtatca ctggaaaacc
tgttctccag tcacacgata cattctaggc tacttcctga cttactggct cctgggacta
                                                                   1200
etectacatt geaactteet geettggaca tgaeetggae tetecaggga caggttggaa
                                                                   1260
gccaacttaa cccaggggtc tgaaagtaaa aatacacatt qqaactqcct ctqctqccct
                                                                   1320
gggatcatta ctgtgtccat tataatcttt ctctttctct ttgaaagctg gtcaggaatg
                                                                   1380
ggagaagtgt cagacactag agageceett etggteetgg etagggeaaa ttttagacaa
                                                                   1440
ctattttctc tgtaagtgaa gattgtcgta ttccaagtct aaaatacacc tggatctgtc
                                                                   1500
tagtcaatca acatagcaga gacagtcttt aaacctacca ttgacctgtg tgtaaattta
                                                                   1560
aatgttcatt ttattgaagt gtaaatttca tcataaggca ttagctgtta ggctggttat
                                                                   1620
cagtecacac aagtttgtat aggeetgaat tgtgtagtgg cagtaaaaaa gtgggaccat
                                                                   1680
ttttaccaaa tgcgacattg tttctgatgt tttttttttat gatttgtgca tgtattttta.
                                                                   1740
tatgaaaaaa acttacaaag atatgcaaat taaacttett teagttataa aaaa
                                                                   1794
```

```
<210> 5266
<211> 1499
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (311)...(910) <223> similar to gi3881107 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5266
gtttcgcgga cctatgtcgc acgtgttgga attcgccctc cggagtgcgc agggcgacgg
                                                                       60
ccccacctcc ggccactggg acggcggcgc ggagaaggca gactttaacg ccaaaaggaa
                                                                      120
                                                                      180
aaagaaagtg gcagagatac accaggetet gaacagtgat cccactgatg tggctgccct
                                                                      240
tagacgcatg gctatcagtg aaggagggct cctgactgat gagatcagac gaaaagtgtg
                                                                      300
geccaagete etcaatgtea atgecaatga eccaeeteet atateaggga agaacetaeg
                                                                      360
gcagatgagc aaggactacc aacaagtgtt gctggacgtc cggcggtcat tgcggcggtt
ccctcctggc atgccagagg aacagagaga agggctccag gaagaactga ttgacatcat
                                                                      420
cctcctcatc ttggagcgca accctcagct gcactactac cagggctacc atgacattga
                                                                      480
ggacacattt ctgctggtgg taggcgagag gctggcaaca tccctggtag aaaaattatc
                                                                      540
tacccaccac ctcagggatt ttatggatcc aacaatggac aacaccaagc atatattaaa
                                                                      600
ctatctgatg cccatcattg accaggtgaa tccagagctc catgacttca tgcagagtgc
                                                                      660
                                                                      720
tgaggtaggg accatctttg coctcagctg gctcatcacc tggtttgggc atgtcctgtc
                                                                      780
tgactteagg caegtegige ggttatatga ettetteetg geetgecace caetgatgee
gatttacttt gcagccgtga ttgtgttgta tcgcgagcag gaagtcctgg actgtgactg
                                                                      840
                                                                      900
tgacatggcc teggtecace acctgttgtc ccagatecet caggacttgc cctatgagac
                                                                      960
actgatcage agageaggag acctttttgt teagttteee ceateegaae ttgeteggga
                                                                     1020
ggccgctgcc caacagcaag ctgagaggac ggcagcctct actttcaaag actttgagct
                                                                     1080
ggcatcagec cagcagaggc ctgatatggt gctgcggcag cggtttcggg gacttctgcg
                                                                     1140
gcctgaagat cgaacaaaag atgtcctgac caagccaagg accaaccgct ttgtgaaatt
ggcagtgatg gggctgacag tggcacttgg agcggctgca ctggctgtgg tgaaaagtgc
                                                                     1200
cctggaatgg gcccctaagt ttcagctgca gctgtttccc tgaaagccag agaagacctt
                                                                     1260
cetettacat cacattaagg cacccactca etacettgge gtegattttt gggtetgaet
                                                                     1320
tgactcgtca actgctggtc tctcccacct ggttggaaat gtcgttggaa acttgcaaag
                                                                     1380
actetecaga cettagggaa caagaggeat caeteagtee ttetgggaea getteeetgt
                                                                     1440
aagcaaagcc aggtttgttc tagattcact ctggccttga aaaaaaagtg ctttttgcg
                                                                     1499
```

```
<210> 5267
<211> 820
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (718)...(444)
<223> similar to gi4538665 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5267
cgtcgacttt tttttttcc tggacagcat ttcattttat tatgtaactg tagaaagcct tgatcaagat aaaaataggg atgacttatc agaaactgaa gaattttctt aggaaagcaa 120
agtttactga aggatacctt cattccagcc atgatgaacg tctgtcttct caggcaatca tgatgaagct ccagggacag tataacccat ctctcccact catccctgag ccttggtcct 240
```

```
ggactgaatg tggttagagg ttgtggaaat aaaaaaaaga accaaaataa gaacactctc
                                                                      300
cataaaagcc aagctcagag actggtcctc ttttgcttag gtacaacagg agcaggaagg
                                                                      360
atcaacattc ttgaaagcat accttctatt catttggctt ttttgacttg gggcgccagt
                                                                      420
gtagagetga geactecaet gecetttete caeteacaaa tgtetgeata ggtacaegte
                                                                      480
eggeactice aagesteste caegicaast coetgggget eteggigges catesagtag
                                                                      540
gccatataat gctgcacctt ggctctcacc tccttctctt tgaaggctac aatctcagta
                                                                      600
                                                                      660
cccagcacag tggcagtctc ttggtggata tactcaatct tcaagatatc aataactggg
                                                                      720
aggtetgaca gtgttagaga caagaagaca agttecatga ggteacecaa agaetteaca
gagaageete eetgetggge atgeeteage actgatggee eeagtggett ttetagaeee
                                                                      780
                                                                      820
aactttgtgt ggtggattag gctagcaggg gtcacttttc
```

```
<210> 5268
<211> 1046
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (772)...(593)
<223> similar to gi1903220 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5268
tttttttttt tgattcgcta caatgagttt attggaaaca cagagtgaaa caaagacaaa
                                                                       60
ggagaaggca gcagagtcat tagtttttca gaagctcttg agggcagccc cggaagggag
                                                                      120
atgttetece cacaegegtg ggeetgteee tegeagagte atagaaecae tateeagggt
                                                                      180
ccgcgtctcc attccacagg caaaagcaca tgggcagagt cccaggtcgt gcagacaggg
                                                                      240
acattcccgg gcctcccccg ttcctccaag ctttggggaa gagctcaggc aagaccaatg
                                                                      300
tatacagcaa aaaaaaaaca gaaggtaggc ggaagaaaaa gatgaatcct cgggacaaca
                                                                      360
aattgactac caggaaaagc tacagagaga gaccatggcg cctcccggcc ctccccggac
                                                                      420
tectgegtee ggggatgget eeeggagegg ageggtgggg agggegetta gagtgeagge
                                                                      480
agegggegge ggetaetggg aggeeggege gggeggege ttetggtgge gegaggtaet
                                                                      540
ggctgggtgg agagtgacgg cgacaggcgc tggcggaggc ggcagcctcc tagcacctct
                                                                      600
tacagetgee geegeagaeg ceaaceeggg eggagggge geaggegtta gtagtgeeca
                                                                      660
ccaccacgtt gctgttgctg gggacgctac tgactctggt ggagacaaca ggggcagtag
                                                                      720
tggaggcgca gagatcgcca cagacaacgc caccgcggga gctgctgacg cctgcagggg
                                                                      780
aaagagacgg aggcgcgcgt caggcgcagc cgcgacctgg gtgagtggct ttgctgcgag
                                                                      840
cccacgegcc ctttgcccag aggctcccag accegcccag egggaggagg ggacggaccc
                                                                      900
cactacttac agacattcac cgagccgacg ccctcgcaca gcctgcaggg agagaaggcg
                                                                      960
agaggtcagt gccgcggaaa aggcgccggg cccccgtgac tgaagtggag ggggacatct
                                                                     1020
gtggccctcc atctgggcac ttgcca
                                                                     1046
```

```
<210> 5269
<211> 1701
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (37)...(793)
<223> similar to gil067223 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5269
                                                                       60
geggeegegg gggeeeegee tgetgegege gegggetaeg eeeacttget gaaegtgeag
                                                                      120
qqccqqacqc tctatqacqt catcttgtac gggctccagg aacactcgga ggtgtctggc
tteettetgg agtgtgaeag eteggtgeag ggegegetge agaageacet egegetatae
                                                                      180
aggateegge ggaaggteae ggtggageeg caceeggage tgegagtgtg ggeggtgttg
                                                                      240
                                                                      300
cccagttccc ctgaggcctg cggggctgca tcgctgcagg agagggcagg ggctgccgcc
                                                                      360
atcctcatcc gcgacccgcg aacagcacgc atggggtggc ggctcctcac ccaggatgaa.
                                                                      420
ggcccagccc tggtgcccgg gggccggctc ggggacttgt gggattatca ccagcaccga
tacctgcaag gcgttcctga gggggtccga gacttgcctc ctggggtggc cctgcccctg
                                                                      480
gagtecaace tggcetteat gaacggegtg agetteacea aaggetgeta cattggceag
                                                                      540
gagetgaegg ecegeaceea ecacatggge gteateegea agegeetett ecetgteegg
                                                                      600
ttettggaee ecetteecae eagtggeate acceetggtg ecaeggtget gaetgeetea
                                                                      660
ggacagactg tgggcaagtt cagggctggc cagggcaacg tggggctggc cctgctgtgg
                                                                      720
tcagagaaga tcaagggtcc tctgcacatc agagcctctg agggtgccca ggtggcctta
                                                                      780
geogeatetg tgecagaetg gtggeetaca gtetecaagt agteegaage ettggetgge
                                                                      840
                                                                      900
gcaggctgat ggggaggctg gggcctgggg cctttggcct ctgtccaggg tcttcccgtc
                                                                      960
ccatctgtct gctgcgccta ctgggtggga gccctggttt ccatctggga aagtccccct
tgtaggtgcc ctgcctggcc ccacccatgc tcaggggccc caggcacgtg ggttgttttc
                                                                     1020
                                                                     1080
tecetggaet teetgtggee ceagaggage ceaeegtgtg agtgetggge teeagatgge
geegggteee aategtgget ceacacaggg ttgtetggga ggaegggaeg gtgtetetgg
                                                                     1140
ccagcactgg cagcttccgg gccttgtacc cctctctgcc tggcatgagc ctcatggggg
                                                                     1200
                                                                     1260
gttggtccct gtgcctggaa gcggggtggt gtccagggtc tgcaggctgg ggctcgggct
ttgggagttg tttcactgtg cttgcttcca gcatgtctca gggtggggct atgcgtggtc
                                                                     1320
                                                                     1380
tagaggggte tggggeattg gateaggtgg eatgtgggtg tetacacate gagaageaca
                                                                     1440
cagggatgag ccactaggta teccatgetg gaggettgtg gaaggetgtg cccateteee
                                                                     1500
atgittcece acctetgite etecteagag cectecagga gegiggggig ggggecageg
cagggeteag gagecageag ggeagagtte tgeetgtgtg tgetgggttt tggeatagee
                                                                     1560
                                                                     1620
tgtgtttgca gtgagagtga cttgctgtca gtcacggggc acagcctcct gttcacccac
                                                                     1680
tggcttcccc cttcccactg aagtgtgagc tctatgtttc agggcatcta ttaaagagtg
                                                                     1701
agccacaggc aaaaaaaaa a
```

```
<210> 5270
<211> 712
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (75)...(481)
<223> similar to gi2760483 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5270
                                                                       60
tttcgtaaaa acagagcggg agtattggga ggaggataag ctggggaaga ggctggccac
actggttgct ataaccacca ccacttccgg tccgttcctc tttacggccc acctcagcgc
                                                                      120
tgcccgcgcg aaatttgtat ccctctgctt gtgtccactg gctcctgggg agcagcgcag
                                                                      180
ggaggaggag gaggaagata tcaaagagcc ctcccattgg gggccccaga tcgccacttc
                                                                      240
cggtgaccag aggtagggaa ggaaacaatc ccgacccgga gtggacaggt gaggagggga
                                                                      300
ggacttgcct cgccgaggcc gctgcgagga gcgtgcccaa gggcgaaggt ccagggaacc
                                                                      360
                                                                      420
eggeteeege geacegaaga eggeegeeat geeggeeegt tgtgtggeeg eecaetgegg
caacaccacc aagtotggga agtogotgtt cogotttocc aaggacoggg cogtgoggot
                                                                      480
getetgggae egettegtge ggggetgeeg egeegaetgg taeggaggea atgacegete
                                                                      540
ggtcatctgc tctgaccact ttgccccagc ctgttttgac gtcttcttcg gttatccaga
                                                                      600
agaacctgcg cttctcccag cgcctgaggc tggtggcagg cgccgtgccc accctgcacc
                                                                      660
gggtgcccgc cccggcacct aagaggggag aggagggaga ccaagcaggc cg
                                                                      712
```

```
<210> 5271
<211> 733
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (733)...(330)
<223> similar to gi4704324 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5271
ttttttttt ttggtgaaac ataatgtttt taatttcaca cctcacagag cacagttgaa
                                                                       60
tgcttcataa cgacataaac aaaagttagg ctaagcactg cagacgagtt gggagggcaa
                                                                      120
agatagette ecctgtggte tgeacteeag gtttgegagg gaatatgtaa etaacaaact
                                                                      180
gettggetaa ggecacagaa atgtgtttee tggtgttttg getgetgaeg ceagtettet
                                                                      240
ctgacaaaga tgtgttaaca ctgggtgcaa caaactgaat ctctttccta agatcagtca
                                                                      300
ggaaaattca tgtcttattt cttcctggat ttctttttgg tggtgtcata agcacggatg
                                                                      360
acttetteet gaetaacage teegtgttet tettgagaaa aageataeee atgegggaeg
                                                                      420
ecetgetgea gggagetgee deggaaeage gtegggggeg tetteeggee eageetettg
                                                                      480
atcaggcggt cgcgctcgtt cagcctcttt ccattgctat cccgcagcac cgcttttccc
                                                                      540
aggactegag aettggttte eageteetge aceteeteea geaatgtett tttgeaggtg
                                                                      600
tgettggetg etetecatge cacatettea ateaaacagg cagtaggaac cagaaataat
                                                                      660
eccaaccaga agtgtgegga geteaggace atagttgeet gteeteteat atetggagea
                                                                      720
atgggaatgg tgg
                                                                      733
```

```
<210> 5272
<211> 1336
<212> DNA
<213> Homo sapiens
```

```
<400> 5272
                                                                       60
acaagcctgt gagcaagcac aagcgggatg agttggtgag agccattgaa tcacccttgt
agaccctgaa ctatcctgca gagaacagct tcaatcaccg tccttacacg gcttgtgatt
                                                                      120
tcatagaagg gatctaccga acagaaaggg acaaagggac attgtatgag ctcaccttca
                                                                      180
                                                                      240
aaggggacca caaacatgaa ttcaaacggc tcatcttatt tcgaccattc ggccccatca
tgaaagtgaa aaatgaaaag ctcaacatgg ccaacacgct tatcaatgtt atcgtgcctc
                                                                      300
tagcaaaaag ggtggacaag ttccggcagt tcatgcagaa tttcagggag atgtgcattg
                                                                      360
agcaggatgg gagagtccat ctcactgttg tttactttgg gaaagaagaa ataaatgaag
                                                                      420
tcaaaggaat acttgaaaac acttccaaag ctgccaactt caggaacttt accttcatcc
                                                                      480
agetgaatgg agaattttet eggggaaagg gaettgatgt tggageeege ttetggaagg
                                                                      540
gaagcaacgt cettetett ttetgtgatg tggacateta etteacatet gaatteetea
                                                                      600
                                                                      660
atacgtgtag gctgaataca cagccaggga agaaggtatt ttatccagtt cttttcagtc
agtacaatcc tggcataata tacggccacc atgatgcagt ccctcccttg gaacagcagc
                                                                      720
tggtcataaa gaaggaaact ggattttgga gagactttgg atttgggatg acgtgtcagt
                                                                      780
atcggtcaga cttcatcaat ataggtgggt ttgatctgga catcaaaggc tggggcggag
                                                                      840
                                                                      900
aggatgtgca cctttatcgc aagtatctcc acagcaacct catagtggta cggacgcctg
                                                                      960
tgegaggaet ettecacete tggeatgaga agegetgeat ggaegagetg acceeegage
agtacaagat gtgcatgcag tccaaggcca tgaacgaggc atcccacggc cagctgggca
                                                                     1020
tgctggtgtt caggcacgag atagaggctc accttcgcaa acagaaacag aagacaagta
                                                                     1080
gcaaaaaaac atgaactccc agagaaggat tgtgggagac actttttctt tccttttgca
                                                                     1140
attactgaaa gtggctgcaa cagagaaaag acttccataa aggacgacaa aagaattgga
                                                                     1200
```

ctgatgggtc agagatgaga aagcctccga tttctctctg ttgggctttt tacaacagaa

atcaaaatct ccgctttgcc tgcaaaagta acccagttgc accctgtgaa gtgtctgaca

1260

1320 1336

<223> similar to gi4589624 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

<220>

aaggcagaat gcttgt

<221> misc_feature
<222> (117)...(1030)

```
<210> 5273
<211> 1045
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(955)
<223> similar to gi1420005 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5273
aatttctgcc atttgaagga aaagtgaatt taaagaaacc gcaacatgta ttttctgttt 60
tggaggatta tggtttagac ccaaactgca tccctgagaa tccacataat atttattttg 120
gtagatggat tgcagatgga cagagagagc ttattgagtc atacagtgtc aaaaagagac 180
```

```
240
actttattgg aaatacaagt atggatgctg gtttgtcatt cattatggct aaccatggaa
                                                                      300
aagtgaaaga aaatgatatt gtctttgatc catttgttgg aacaggtggc ctgctgatag
catgtgctca ttttggtgca tatgtgtatg ggacagacat agactacaac acagttcatg
                                                                      360
gcttgggaaa ggctactagg aaaaaccaga agtggagagg accagatgaa aacattaggg
                                                                      420
ccaatcttcg tcaatatggt ttagagaagt attaccttga tgtcctggtt tcagatgcat
                                                                      480
                                                                      540
ctaaaccttc ctggaggaag ggcacatatt ttgatgcaat cattactgat cctccatatg
gtatcagaga atctacaaga agaacaggtt cacagaagga gataccaaag gggatagaaa
                                                                      600
                                                                      660
aatgggaaaa atgtccagaa agccatgttc ctgtttcctt gagttatcat ctgagtgata
                                                                      720
tgtttcttga cctgttaaac ttcgcagctg agaccctcgt tttaggtgga agactagtct
attggttacc ggtgtatacg ccagaataca ctgaagagat ggtgccttgg cacccttgcc
                                                                      780
tggaactegt tagcaactge gagcagaage tttecagtea cacateaagg egettgatea
                                                                      840
caatggaaaa ggtgaagaaa tttgagaatc gggaccagta ttcacatctg ctaagtgatc
                                                                      900
attttctgcc ataccaaggt cataattcct tccgtgagaa atattttagt ggggtaacaa
                                                                      960
aaagaattgc caaggaagaa aaatccaccc aggaatgaaa attaagattt tgtcattgat
                                                                     1020
gaaagaataa gaatttgatt taaaa
                                                                     1045
```

```
<210> 5274
<211> 1188
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (23)...(581)
<223> similar to gi4469173 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5274
attecegggt egacgattte gteacaatge eegeegggge ttettettet eecatattgg
                                                                       60
gtggctgttt gttcgcaagc atcgagatgt tattgagaag gggagaaagc ttgacgtcac
                                                                      120
tgacctgctt gctgatcctg tggtccggat ccagagaaag tactataaga tctccgtggt
                                                                      180
geteatgtge tttgtggtee ceaegetggt gecetggtae atetggggag agagtetgtg
                                                                      240
gaatteetae ttettggeet etatteteeg etataceate teaeteaaea teagetgget
                                                                      300
ggtcaacagc gccgcccaca tgtatggaaa ccggccctat gacaagcaca tcagccctcg
                                                                      360
gcagaaccca ctcgtcgctc tgggtgccat tggtgaaggc ttccataatt accatcacac
                                                                      420
ctttcccttt gactactctg cgagtgaatt tggcttaaat tttaacccaa ccacctggtt
                                                                      480
cattgatttc atgtgctggc tggggctggc cactgaccgc aaacgggcaa ccaagccgat
                                                                      540
gatcgaggcc cggaaggcca ggactggaga cagcagtgct tgaacttgga acagccatcc
                                                                      600
cacatgtctg ccgttgcaac ctcggttcat ggctttggtt acaatagctc tcttgtacat
                                                                      660
tggatcgtgg gagggggcag agggtgggga aggaacgagt caatgtggtt tgggaatgtt
                                                                      720
tttgtttatc tcaaaataat gttgaaatac aattatcaat gaaaaaactt tcgtttttt
                                                                      780
ttttgtttgt tttgtttttg agacagagtc tcactctgtc acccaggctg gagtgcagtg
                                                                      840
gcgcagtctc ggctcactgc agcctccacc tacctggttc aagcaattct cctgcctcag
                                                                      900
cctcctgagt agctgagatt acaggagcct gccaccacac ccagctaatt tttttgtatt
                                                                      960
tttagtagag acagggtttc atcatgttgg ccagactggc ctcgaattcc tgacctcagg
                                                                     1020
caatccacce geeteggeet eccaaagage tgggattaca ggegtgagee accgcaccet
                                                                     1080
gccgaaaaaa acttttttt ttttgagacg gaggctcgct ctgtccccca ggctggagtg
                                                                     1140
cagtggcgag atctcagctc actgcaagct ccgcctcccg ggttcacg
                                                                     1188
```

```
<210> 5275
<211> 2402
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (360)...(1355)
<223> similar to gi4104634 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5275 cgcagtcccc gagcgagacc aaacaggtgg aatccgggct ggagccggag ctccggcggc 60 gegggtggeg geaegteeet ceagacagta ceaeaggeae etggagtace ggeateggte 120 getgtggccc ccgagtgtcc gtcagagcct aggggagcct gcctcccgc gcctcgtcgg 180 ggcccggcca ggcaccttgg ccgccggcgc acggacgcgg gcacgagcac tagatcacgg 240 ctgctggacc tcggcacgtt gacaagattt ctctggggta ccgcggagga ttactttgaa 300 tttcggtggt cgcctgtggt ctggcatatt tagaacttaa gtctattatt tcgggcacca 360 tgactttgag gcttttagaa gactggtgca gggggatgga catgaaccct cggaaagcgc 420 tattgattgc cggcatctcc cagagetgca gtgtggcaga aatcgaggag getetgcagg 480 ctggtttagc tcccttgggg gagtacagac tgcttggaag gatgttcagg agggatgaga 540 acaggaaagt agccttagta gggcttactg cggagactag tcacgccctg gtccctaagg 600 agataccggg aaaagggggt atctggagag tgatctttaa gccccctgac ccagataata 660 catttttaag cagattaaat gaatttttag cgggagaggg catgacagtg ggtgagttga 720 gcagagetet tggacatgaa aatggeteet tagacecaga gcagggcatg ateceggaaa 780 tgtgggcccc tatgttggca caggcattag aggctcttca gcctgccctg caatgcttga 840 agtataaaaa gctgagagtg ttctcgggca gggagtctcc agaaccagga gaagaagaat 900 ttggacgctg gatgtttcat actactcaga tgataaaggc gtggcaggtg ccagatgtag 960 agaagagaag gegattgeta gagageette gaggeeeage aettgatgtt attegtgtee 1020 tcaagataaa caatcettta attactgtcg atgaatgtct gcaggetett gaggaggtat 1080 ttggggttac agataateet agggagttge aggteaaata tetaaceaet taccagaagg 1140 atgaggaaaa gttgtcggct tatgtactaa ggctggagcc tttgttacag aagctggtac 1200 agagaggagc aattgagaga gatgctgtga atcaggcccg cctagaccaa gtcattgctg 1260 gggcagtcca caaaacaatt cgcagagagc ttaatctgcc agaggatggc ccagcccctg 1320 gtttcttgca gttattggta ctaataaagg attatgaggc agctgaggag gaggaggccc 1380 ttetecagge aatattggaa ggtaatttea eetgagtete agggaaceae gaagggatat 1440 ggcaacgagt agagcatgaa ggtagaacag totatatact cttgtgacac atacaatccc 1500 taccttgtgc tgccaagtaa ctcatttttg tgcaattctc agtataagcc ctttgtcgtt 1560 totatgocta tttaaagtot ootaaaggtg taattgacta ggaaggatgt agttotacac 1620 tgccatttac ctatttaaat tcatccttgt gaatatcttt gttgttgttg ttgagacaga 1680. gtotogotot gtoaccoagg otggagtgca gtggcgtgat ottggctcac tgcatcotoc 1740 geetteeagg titaagetat teteetgeet eagtigeeeg agtagetggg actacaggea 1800 tgtgccacca cgcccagcta agttttgcat tatcagtaga gacggggttt caccatgttg 1860 gccaggctag tttcgaactc ctgacctcaa gtgatccacc tgcttcggcc tctgaaagtg 1920 ctgggattac aggcgtgaga cactgcgccc agcctcatcc ctgtgaattt cttattgtac 1980 acaagttett teactatetg tgtgcagtgc tetgagggga cagacaagge ttgggtgtat 2040 atgccaacca gatctcattg aagtatcagc ttgtttggta ctaggtgcaa gtgtagcatg 2100 tcacatgtga ccatgttggg atccattgac aatttttagg gtatgtactg gcctacattt 2160 atgatgaaga teetgagegg aggttaagat attaagttat ttteeatatg aatcagaatt 2220 atattgattc tgtgcaatca aaacaaaagg cagaatagaa tgctgagatt ggttaagttt 2280 gcaatgacca tettgaacca cagatttetg etatgtgtea teaaaacate tagttetgag 2340

```
<210> 5276
<211> 3009
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(521)
<223> similar to gi63803 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5276tttcgtgccg tgcaagctgc ttatcccaga gagagatcca ttggaggaaa tagcagaaag 60 tteteeeeag aeggeageea atteageage tgagetgttg aageaggggg cageetgeaa 120 tgtgtggtac ttgaactctg tggagatgga gtccctcacc ggccaccagg cgatccagaa 180 ggccctgagc atcaccctgg tccaggagcc tccacctgtg tccacagttg tgcacttcaa 240 ggtgtcagcc cagggcatca ccctgacaga caatcagagg aagctcttct tccggaggca 300 ttaccccgtg aacagtgtga ttttctgtgc cttggaccca caagacagga agtggatcaa 360 agatggccct tcctcaaaag tctttggatt tgtggcccgg aagcagggca gtgccacgga 420 taatgtgtgc cacctgtttg cagagcatga ccctgagcag cctgccagtg ccattgtcaa 480 ettegtatea aaggteatga ttggtteece aaagaaggte tgagaactee ceteceteec 540 tggacccacc gatgcctctc gaagccctgg agacagccgt tgggtgaggg tggggccccc 600 actittiace aaactagtaa acetgacatt ecaggeecat gaggggaaag aggatettee 660 agctctgcaa aaacaagaac aaacaacatc accgtgaatt ggcctttcct gaaagtgact 720 tatctgacac atctctgtag ccacatgctt tttgggtaga agaagctggg catgggtgca 780 ccccacccc tagggtcccc atgggaaagg gacatgcaag gaaacagcac agaacacgag 840 gtggtcccca tgtccctggc acactagcat tccgggggat gaggaatccc cagcccttga 900 ggcagaggtg ccgagtgact gccatgcttc gcccgtccgc atgggcgctt ctgtccagct 960 gcacccgagg ccgggggttt ccctcacctc ggtcttccca agatggagat gctaacgaaa 1020 ctgagaaggg ggcgtatgtt tgacgaaggt ttgtgcaagt caggcccttc tggaacacag 1080 cagggcctac aacgagggc ctttgcgatg ggctgtgagg atgggggtgg tgggaagaat 1140 tggccacgtt agagacccca tgccacccca ccatggtgag tgctctgtgc ctcctgctca 1200 cctgtggtga gctgggcgag ctgggcgagc tgggcgagct gggctgggga gagcctgtga 1260 ggaccgagag gagaaatgag aagaaggaac aaaaatatta tttctatgta atttatatt. 1320 tacttatgcc aaattattta tgataatttg ccattgctat actgtaccag tgtcaaatgc 1380 tgcagcctgc caagctgtga ttttgtgagg cttgtcccta tgtaggatgc accgcaggcc 1440 cetggccact gaaagagtgt gcagtggact gtgggtetee catatgeggt geegeecaaa 1500 ggtggctttg cctcaagcaa cctaccctga tgttttactc attggaatgt ttttccccga 1560 ttgtgggatg actctttct gatggagaga gtccaggagg gatggaaaac gcctggattt 1620 aagctcagca tcccccacat gggcttttcg atcatcttca ggcctgaagc tgcacgacct 1680 gaagttcgcc tgcatttatc agccctcttt gtgctgctcc ttgccacctt ggggttcctg 1740 ctggggacca tgtgtggttg tggcatgtgt gagcagaagg gaggatgagg aaaaagagaa 1800 gaaaccccgg tactgacaag ctgtttttga gtgccactgt ttgccatcat ctaagccact 1860 gaatcaagtg tatttcaggc ttatttcaac attccaatgc cctggttttc ctgcttgaat 1920 ctgttcgtgg tcaaaggttt gggggaattt gtgaccctgg aacatcccca gagtgaaaga 1980 tggagctggg ccacatcaga ataaggcctt ggccccatcc tctcacagcc taggtgctct 2040 gcaggcatgc tgactgtcct gattgcgatc cagcccgaaa ttccctcctc tgctttcaaa 2100

```
2160
agtcaaatcc cccattetta ggccacactg gtgtcacaag etectgtcag ggagetgggg
                                                                     2220
tttgggaatg tgctttgtga actctgcttt aaagtgaggg gccgaggaaa acttagaaac
aggcagagtt ggaagcagcc aaatcacagt gggtgttgtg tgtgtgtgcg tgtgtgcatg
                                                                     2280
cgtgcgtgta tgcgtgtgtg aaagcaggtg gaccattcca ctttttagct cctattgatg
                                                                     2340
caccaaacca agtgcctcat ttctgtgcca aatgtttgcc ttggtcgttg tggacctcct
                                                                     2400
tetetaaett geggtggeat gaetgteagg aggtgetgge atttteagea gateeteatg
                                                                     2460
tgttgaccct gatgtettta geagaggeet etageatete ggttttteat eeactgeagg
                                                                     2520
aatgtggcca cagggagcag aggtttgtac tttccccaag aggtcctcat cctgagacgg
                                                                     2580
tetetaceca tgtttäacec aaagagtgea ggecaggtte ettateette tgätgaagga
                                                                     2640
tgagagaget catttagaag teagageaaa etagggtete agtattgaga aaegeageet
                                                                     2700
gccagggaat cacagagaca tcggggtgcc cgcgatggcc ctcatgaagc catgcctcga
                                                                     2760
cggcattcag gaagccctgc aaacgtgctt tttgaactca ttggccaggt gtgattttta
                                                                     2820
cacaaggtaa acgtggtcaa gggcatcggg gaatttgctc caagcagata gctccctctg
                                                                     2880
aggaaccaaa ggaagcaagt ttccacgatt tctgaagagc tggtatagga agtttctttc
                                                                     2940
tteettttgt gttacatgtg cattaaacag aacaagetgt gtgteateae agattgtact
                                                                     3000
                                                                     3009
gtgggctca
```

```
<210> 5277
<211> 873
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (129)...(618)
<223> similar to gi289622 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5277
gaattcccgg gtcgacgatt tccttgacgc taatgggggt gtggctggga ccctggggca
                                                                       60
gatttatgtt tagcccctcc cacggagggt gccgctgtaa ccccagcttc ctcccccggc
                                                                      120
ecccaggegt etetagegtg gaggtecagt ggatecegge eetgetgeee tettaetgee
                                                                      180
agtttgacaa gcccctggag gaaccagccc ctacatactg ccccgagcgg gggcgggtgc
                                                                      240
tgtgtcaccg ggccagcgtg ttctatcgcg tgggctggcc gctccccgcc atcgaggtgg
                                                                      300
attttccaga ggggattgac cgctacaagc actttgcccg gttcctgctg gaagggcagg
                                                                      360
tetteegeaa getggeetea taeeggaget gtetgetgte eageeeegge aeeatgetga
                                                                      420
agacgtgggc caggctgcag ccccgtacgg agagccttct gcgagccctg gttgcagaga
                                                                      480
aggetgactg ceatgaagee ttgetggetg ettggaagaa aaaceecaaa tacetgetgg
                                                                      540
ctgagtactg tgagtggctt ccacaggcca tgcaccccga tatcgagaaa gcctggcccc
                                                                      600
ccaccactgt ccactgacca gaaacctggc tgcagggccg aggactggtt tggggactgg
                                                                      660
agggetggea geagetggte accgtgegae egtgaecaee tggeatggge ttegtggeet
                                                                      720
gctctcagga agtgggtcaa gccctgggaa ccctcatcca tgagagctcg atcccgtatg
                                                                      780
aagggtgctg ccgcccgtgc catctggccc gggggtgact ttttgaactg tttattatat
                                                                      840
ggtggatgat gatttcatct cacgtgctgg aaa
                                                                      873
```

```
<211> 1489
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(497)
<223> similar to gi3930525 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5278
tttcgtaaag tggagtgcac ccccagccgg gagcacctga agcaccagac cgtctaccgc
                                                                    60
ctgctcaagt gcgccccag gggcaagaac ggcttcaccc ctctgcacat ggctgtggac
                                                                   120
aaggacacca caaacgtggg ccgctatccc gtgggcagat tcccctccct gcacgtggtc
                                                                   180
aaagtgetge tegaetgegg ggeegaeeeg gaeageaggg attttgaeaa caacaceeeg
                                                                   240
ctacacatag cagcccagaa caactgcccg gccatcatga atgccctgat cgaagcaggg
                                                                   300
gcccacatgg acgccaccaa tgccttcaag aagacggcct acgagctgct ggacgagaag,
                                                                   360
etgetggeea ggggtaceat geageeette aactaegtga eeetgeagtg eettgeggee
                                                                   420
cgggccctgg ataagaacaa gatcccttac aagggcttca tcccggaaga tctggaggcg
                                                                   480
ttcatcgaac tgcactgacc tgcccagaac gcctgcaccc tcacctctcc cctctcctgc
                                                                   540
tgagatgggg gaaateegge tgeggeatag eagatgeteg ttettgeete etteaggeae
                                                                   600
caatcaggag aagggttctg cctcccatcc cctctacctg cagacagggt cggaggtgtt
                                                                   660
agegageett tggtgetaga ageetgeggg gteatgtget aagaggaeag tettteteeg
                                                                   720
ggageceget cacteattet gagttaggaa aagacacaag acetteecea cateetgtet
                                                                   780
gcctgggtta gggaggcctt tgccttgtta cctagaggcg gagggactga agccattgcg
                                                                   840
ttccttccct gctagaaaca caggaagaag ttgaggacgg tctgccttcc ctcgtccctt
                                                                   900
tacctggcca gataactcca gccgctgaat acagtgttag gactgggggc tcctgagatg
                                                                   960
agagtttgag attcagggaa tgagaccacc tctcatttct tccagcatga tcgcgccctg
                                                                  1020
ctcccgtgcc accgtagtcc ctggcagaca ggcagggctc tgcccagggc agcctgccac
                                                                  1080
ttgcataget tteggttggt ttggtgttet gtttatttaa taagtgggea ggttgeaage
                                                                  1140
1200
ggccccctta aggggaattt caacccgggg ggattttggg ggccctgaaa gggccgaggc
                                                                  1260
cccagggagg gacctgtttg tgtgaggaat ttggggagcg agaaaaaagc ccacggggtc
                                                                  1320
acceettaaa acagggggga ceggeetttt ttataetttt eeaetttagg gettttaaca
                                                                  1380
ggttttccga ttttacaggc ttttccaggt ttcctttttc tttagagaaa agacggggct
                                                                  1440
tocaaacaag attogggagg goocccaagg cotgaaacct otttgcoog
                                                                  1489
```

```
<210> 5279
<211> 1614
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1011)...(525)
<223> similar to gi3916727 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5279
caaaactttt tttggtttt ttgtttgttc attcaacaag tgtttattga gcatctacta
                                                                       60
catqccagac actattctag aaacctggga aaggaggggt tagggtagct tggagctgtc
                                                                      120
ccagctgtag ctctgtctcc cagaagtgag gtctgcaggg gaacagggtc tgggggtcct
                                                                      180
cctgcctggg agagggaagg ctgagtgtat aaaaaggtgg aagcctctaa aaatgagaag
                                                                      240
gctgggtgtg tgggactcat gctggtgcct tcccagacga aggagaggc ccagaggagg
                                                                      300
                                                                      360
cagetteetg gageagagae ggeageagga gegeeegtge eeggeateae eteetettea
geacggatat geaggaette ttgaggggee egatetgeaa gtgggegtee acaeteteea
                                                                      420
ggaagaaggc aggcttgagt ctgtgggtga agagccccgc aaagtgactg tccaggcggc
                                                                      480
tetggaaggg gteaatgggg gaggeeggga tgeeaceeeg geggggeegg gaggeettea
                                                                      540
gcctccgcag gaggctcatc ttgccgtccc gtacagcata gaaggccaag gcacggtcag
                                                                      600
cgtattccag gcagacccca accgtgggcg agaaggggtg gggcagggga gcctccagcc
                                                                      660
catgaaacca gacggagaag ctgcgtccat tccactgcag gcagcaggag tgggcgttgc
                                                                      720
ggcccagccg gccgcggtcg tagggctctt gtggggagaa gtcttcggcc atgaccccca
                                                                      780
tgctgaccca gccctcgata atctccacct cccagtagta ggtgcctcgg tccagggcac
                                                                      840
cctcgcccag cacctgctca caatgggtga agcgggtggg cgacaagggg tagttgatag
                                                                      900
gacacagcac cetettgaca cetttggtte caaacagetg caggaacttg tetgetgtgt
                                                                      960
cgctgtccaa atccacaata taggcaaact tgaggaaata gtccctggga gcttcactct
                                                                     1020
ccaagaggtt cgtactctcg aggtcttggg gctcagcatc agcttccgag tccagcttct
                                                                     1080
gtggcccatc ctcgttgcca cccggccccc tcagetgctc ccactggttg acgcaggcca
                                                                     1140
eggecageat gteteteact geaeggacag ettgggatga tttggtgaag etgageteee
                                                                     1200
tegggggtee aggeeeaggg ceacacecat ceteeaggge eagcettagt geeageaget
                                                                     1260
cctgtgccag acaaatgccc attaaagtgc tgctggccat ggctcctcct tgctggggt
                                                                     1320
ggaggcaget etgecaggaa gteatgeace cactgeetee teeteeetee acceeeetg
                                                                     1380
teccagette tgtteettee gtggeeecca gageggeett cacetgeagg aagetgaetg
                                                                     1440
agtcagette agggacetgg etgagattet ggegggeteg geteaggegg etgegetgtt
                                                                     1500
cetectgteg eegeaggtea eeetgggage ggeetageat ggeagaatee eeeteetega
                                                                     1560
tgaagcccag cacctgggtc tggaagccct gacgaaatcg tcgacccggg aatt
                                                                     1614
```

```
<210> 5280
<211> 2157
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2114)...(1712)
<223> similar to gi4929585 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5280
ttgagatgga tcagaacttt gtaattatat tcaggaggag ttctgtctat tcattcatca
                                                                       60
tgacatgtgt agtatcatgt gcttttttt ttaaaattta ggtttaatac attttcaatc
                                                                      120
agcetatgea catggaatat gegeeattta gaacegtgga attetgggee cagetggaet
                                                                      180
cagccagcac agagcaaaca ctgttagtaa tgatttgaac acttttttga atactcggta
                                                                      240
tateteaett eeegtggeat gatgaaaaca aacatttatt gaacaegaae tatgtgetag
                                                                      300
atgtaccett tgtetttatg ttgettatgg tetggggagg aaagagaege taaacaagta
                                                                      360
accacaagtt tataagtttt acaaaagggg cagatgatat gccacagaga tgcagaacag
                                                                      420
aggggtccga gtctagttta gggaatcagg ggaaggcatc tctgcataag gaatatttga
                                                                      480
```

```
540
gctgagatcc agaggatgag aggaagttag agcaggatgc agggagcagt acatgtgtgg
gcttcccttg aacttaggaa gaaagggtgt ttaatgggca gcaggaagta ctaagctcca
                                                                      600
cetetetact gtgaactggg gettgeecca tecacactgt ggatetegae teeteatttg
                                                                      660
tcatgagtgg ttggctgaga gggcctgtgc tgacctggac tctgggctgg gtctagcggg
                                                                      720
                                                                      780
caaacgccac actaaaagga gaaggagtcg tgggtaggca ggcaaccctc aggactccct
teteteagge ateacacagg etgttgegaa tteageacea ecagtgatea gageaatttt
                                                                      840
aaacatcatc cccaceggta atttttactc gtttctttat taatatagaa aaggagccca
                                                                      900
gggcagctgg accagtagta caaagcacca ggagttaata ccattctggt gaaggggatg
                                                                      960
gttttacaaa agtgaaggag caggcaggag ccaccaggtt ctgaggccag gcccagccta
                                                                     1020
ctgcccagaa cccctgaaac ggctccctgg gaaaaagctg acagatgggt caggggtgga
                                                                     1080
ttgagetgga aaccatgggg acagatggca gggatagagg gtcatgcagt gggaaccacc
                                                                     1140
cagtggctga taaggacagg gaacttgtgg ctggaggctc cccattgggc catgggcagg
                                                                     1200
                                                                     1260
ggcttgcaga tggcctcagc tctgggggca ggtagagaaa ctgcagagac tgatgggcat
ggagaaccca gacatggccc tggggctgaa gggcctttcc accctctctt caccaggagc
                                                                     1320
cacctttgct ctatactaca tatggggctt cagggcccaa ggcacagggg aggctcagag
                                                                     1380
gcctccagtt gggaggaaga tggggcaagg aaggaagcac ttgagtgtcc ctagcttagg
                                                                     1440
cagccgggga tgagacacag gcaggacaac agcaccccg catagtgggg ctagaatgtg
                                                                     1500
ggacagggac gggcttatcc tcggccagtg actaggacca gccccatggc aatggtgcct
                                                                     1560
gtetecagee ttageaaate aagtgtgeaa caageacagg gtgteggeag acetgggete
                                                                     1620
tageettaca agetetgeea gaaettgaat cacacagage tgtateacea tggteeagee
                                                                     1680
atgreetgee tiggeetgit tecteetetg teaatgagga teatgetggg gateeceatg
                                                                     1740
gtotocogoc atgtototat ogatgtoaca aactoatoot cagococoto ogggtocott
                                                                     1800
gggaatgetg geettgaget tegecegaag ccaaacagat egaaggtgtg cagtgtgegg
                                                                     1860
egggeactea gtgagteeat gttgaggate cagagaceca egeegeeeee aaaaceatge
                                                                     1920
accatcacca agggggtgcg gtcgttttgc tcggggctca cagtcaccgt ccagatctta
                                                                     1980 ·
ttttggtttg ggagggatac atatctggcc aggaacttat tctggaggaca ctggaggatc
                                                                     2040
ctggcttcca cattcttcag ctgagacatg taagtggggc gccacgtaaa cagccagcta
                                                                     2100
ctcagccage cttgagcctg ctgctccaga tcatgcgaaa tcgtcgacca ggggatt
```

```
<210> 5281
<211> 1691
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7)...(798)
<223> similar to gi558671 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5281
tttcgttcca tcatctccgt gctgccttgg aagagaatcg tggccgtgtc ggccaagaag
                                                                       60
aagaacteca agaaggtgea geecaacage agetaceaga acaacateac geaceteaac
                                                                      120
aatgagaacc tgaagaagtc gctgtcgtgc gccaacctgt ccacattcgc ccagcccca
                                                                      180
ccggcccagc cgcctgcacc cccggccagc cagctctcgg gttcccagac cgggggctcc
                                                                      240
tecteagtea agaaageeee teaccetgee gteaceteeg cagggaegee caaaegggte
                                                                      300
atcgtccagg cgtccaccag tgagctgctt cgctgcctgg gtgagtttct ctgccgccgg
                                                                      360
tgctaccgcc tgaagcacct gtcccccacg gaccccgtgc tctggctgcg cagcgtggac
                                                                      420
egetegetge ttetgeaggg etggeaggae eagggettea teaegeegge eaaegtggte
                                                                      480
ttcctctaca tgctctgcag ggatgttatc tcctccgagg tgggctcgga tcacgagctc
                                                                      540
```

```
caggoogtoc tgotgacatg cotgtacete tectacteet acatgggcaa cgagatetee
                                                                      600
tacccgctca agcccttcct ggtggagagc tgcaaggagg ccttttggga ccgttgcctc
                                                                      660
tetgteatea aceteatgag etcaaagatg etgeagataa atgeegacee acaetaette
                                                                      720
acacaggtct tctccgacct gaagaacgag agcggccagg aggacaagaa gcggctcctc
                                                                      780
ctaggcctgg atcggtgagc actgtttcct gcgtcatggc tcaaggattc aatgcatttt
                                                                      840
taagaattta ttattaaatc agttttgtgt acagtatgtg tctagcaaag ccaccaaggg
                                                                      900
ceteacettt eccaeagtet etecetgggg ttttttteat ecctgeeaag aactetggge
                                                                      960
acttttgaac tcacgagcet tgcgcaaaac ccagaagatg tattcagage cacccaggce
                                                                     1020
actgacetee caetttgggg aactcaaagg actgacetge eectgeegee tgtgeeettg
                                                                     1080
ctgggtccag ggtaggcaag gctgccggct gcaccctgta tggagctaga gaggggcctc
                                                                     1140
tggctgcctg gcccagggag gaattggggt ttctggttgg aggccctttt ctggctcctg
                                                                     1200
tgtggagtta ttcactctcc cagaggctcc tggagccagc caccctaact gagctgccag
                                                                     1260
tggggtcgtg aggcaagatc cccgccaccc ggggacatct tcaatctagg cgaggcgaag
                                                                     1320
ctgagcgggt ctagtggaaa gattgtgtct ggtcgtttga ccacacaccg ccctgatttg
                                                                     1380
ctgatttctt tttttaggga gaagggcttt tctttagtgg agaaatggaa ctcgccccc
                                                                     1440
tacccccttg tctgctgctc ccagccacgt tggtggtatt ggccgatgag ctggtttgac
                                                                     1500
tcattaattt ctctcaattt gggtcccagc taaagaggtg gggtgaagct ggggacagct
                                                                     1560
ttcctgggtg agtttttctt ttgaataatg tagtgcagtc accctgtggg caaatgccag
                                                                     1620
ggacagetge aggtgeeeat tageaacgee tgeettetgg geaaggtgag ggatgeeata
                                                                     1680
ccttgagacc a
                                                                     1691
```

```
<210> 5282
<211> 2593
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (457)...(1154)
<223> similar to gi4587558 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5282
ggcccggaat tcctcgggtc gacgatttcg tggagagtcg ggggtcacca ggcctatcct
                                                                       60
tggcgccaca gtcggccacc ggggctcgcc gccgtcatgg agagcggagg gcggcctcg
                                                                      120
etgtgccagt tcatcctcct gggcaccacc tctgtggtca ccgccgccct gtactccgtg
                                                                      180
taccggcaga aggcccgggt ctcccaagag ctcaagggag ctaaaaaagt tcatttgggt
                                                                      240
gaagatttaa agagtattet tteagaaget eeaggaaaat gegtgeetta tgetgttata
                                                                      300
gaaggagetg tgeggtetgt taaagaaaeg ettaacagee agtttgtgga aaaetgeaag
                                                                      360
ggggtaattc agcggctgac acttcaggag cacaagatgg tgtggaatcg aaccacccac
                                                                      420
ctttggaatg attgctcaaa gatcattcat cagaggacca acacagtgcc ctttgacctg
                                                                      480
gtgccccacg aggatggcgt ggatgtggct gtgcgagtgc tgaagcccct ggactcagtg
                                                                      540
gatctgggtc tagagactgt gtatgagaag ttccacccct cgattcagtc cttcaccgat
                                                                      600
gtcatcggcc actacatcag cggtgagcgg cccaaaggca tccaagagac cgaggagatg
                                                                      660
ctgaaggtgg gggccaccct cacaggggtt ggcgaactgg tcctggacaa caactctgtc
                                                                      720
cgcctgcagc cgcccaaaca aggcatgcag tactatctaa gcagccagga cttcgacagc
                                                                      780
ctgctgcaga ggcaggagtc gagcgtcagg ctctggaagg tgctggcgct ggtttttggc
                                                                      840
tttgccacat gtgccaccct cttcttcatt ctccggaagc agtatctgca gcggcaggag
                                                                      900
cgcctgcgcc tcaagcagat gcaggaggag ttccaggagc atgaggccca gctgctgagc
                                                                      960
cgagccaagc ctgaggacag ggagagtctg aagagcgcct gtgtagtgtg tctgagcagc
                                                                     1020
```

```
ttcaagtcct gcgtctttct ggagtgtggg cacgtttgtt cctgcaccga gtgctaccgc
                                                                   1080
gccttgccag agcccaagaa gtgccctatc tgcagacagg cgatcacccg ggtgataccc
                                                                   1140
ctgtacaaca gctaatagtt tggaagccgc acagcttgac ctggaagcac ccctgccccc
                                                                   1200
ttttcaggga tttttatctc gaggcctttg gaggagcagt ggtgggggta gctgtcacct
                                                                   1260
ccaggtatga ttgagggagg aattgggtag aaacteteca gacccatgce tecaatggca
                                                                   1320
ggatgetgee ttteccaect gagaggggae cetgtecatg tgeageetea teagageete
                                                                   1380
accetgggag gatgeegtgg egteteetee caggageeag ateagtgega gtgtgaetga
                                                                   1440
aaatgeetea teaettaage aecaaageea gtgateagea getettetgt teetgtgtet
                                                                   1500
tetgtttttt tetggtgaat egttgettge tgtggaettg gtggaggaet cagaggggag
                                                                   1560
gaaaggetgg geecegagtá caacggatgé ettgggtget geeteegaag agaetetgee
                                                                   1620
gcagetttte ttettttee teatgeeceg ggaaacagte tttetteaga attgteagge
                                                                   1680
tgggcaggtc aacttgtgtt cctttcccct cacctgcttg cctccttaac gcctgcacgt
                                                                   1740
gtgtgtagag gacaaaagaa agtgaagtca gcacatccgc ttctgcccag atggtcgggg
                                                                   1800
ccccgggcaa cagattgaag agagatcatg tgaagggcag ttggtcaggc aggcctcctg
                                                                   1860
gtttcgccac tggccctgat ttgaactcct gccacttggg agagctcggg gtggtccctg
                                                                   1920
1980
gccactggcc tagtgtcctg gcctcacagc ttccttgcaa ggctgtcaca aggaaaagca
                                                                   2040
geeggetgge accetgagea tatgeeetet tggggeteee teateeagee egtegeaget
                                                                   2100
ttgacatett ggtgtactca tgtcgcttct ccttgtgtta ccccctccca gtattaccat
                                                                   2160
ttgcccctca cetgcccttg gtgagccttt tagtgcaaga cagatggggc tgttttcccc
                                                                   2220
cacctctgag tagttggagg tcacatacac agctctttt ttattgccct tttctgcctc
                                                                   2280
tgaatgttca tetetegtee teetttgtge aggegaggaa ggggtgeeet caggggeega
                                                                   2340
cactagtatg atgcagtgtc cagtgtgaac agcagaaatt aaacatgttg caaccaaaaa
                                                                   2400
aaaaaaaagg gggggcgctt tcaaaggggc caggtttttc taccgggggc ggggagtgaa
                                                                   2460
aaaccttttt taaggggccc caaaattcaa tacccgggcc cgggttataa cgctttggat
                                                                  2520
gggaaacccc tggggttcca aaactaatcc tcttaaaaaa aaaggaatca agtttctcgt
                                                                  2580
atggtctctt aaa
                                                                   2593
```

```
<210> 5283
<211> 1139
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1140)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (976)...(503)
<223> similar to gi2447128 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5283
acgatttcgt gtttctgcca gttacactta attttgacat atcagtcagt ctggtgccgg 60
aagaacttct tagttctctt tttgatgatc ctgggcttca caaggggtct gagggtggcc 120
atgatgctga ggaggagatg gctgccacct ccgtaggcag cgccgagaga ggggcttttt gttttttgag acttcaattt aaattttact ttnnnnnnn nnncttacaa aatacaaagt 240
aaaaagaatg agaacaaaat aaattttcag atacccaaaa attgaaagag ttcataccaa 300
```

```
360
aagacttcac taaatgaaca ctgaaagacg accttcagaa aaaaacaaaa tgatcctgga
cagtagtgta aagatataga aagatgaggc catgcaggta ggtaggtgcc aaattatgta
                                                                      420
agtccagcat gccaagccaa ggaatcagag gctccacagg gatctaagga ggttctggaa
                                                                      480
ggtttccatt gtagtccaca tcttctatgc tacaacccca tttaacaaga agttgcaagc
                                                                      540
                                                                      600
agccaagccg cccatgaaaa gctgcataat gcacaggtct ccattctctc ttatcagtca
cactgggatc cactccactt cggagcatta tttgtaaagt gaaagaatgt ccatgagttg
                                                                      660
cagcaagatg taaaggagtg catccccggt catcctgggc tgtcagattt gctccattca
                                                                      720
ttataagage etgtacacaa geateetgae eeetgattge agetatgtga gatgetgtee
                                                                      780
aacctctcgt tgttacgtgt gtgatatcag ctccatgcca gagcagccaa tgaagacact
                                                                      840
ccaaacttcc agaatgtgct gcccaatgta aaggggtaaa cttatggaga acatcaagtt
                                                                      900
                                                                      960
cattaatgct ggctccacgt accactattt ctgaaagctg ctttacatct ccagctcgta
ctgcatcatg tatgctgcca aaatgcacct tcttcctgga acaggggtgt gcagtctcac
                                                                     1020
tagagaaagt ggaggggcct gaattgccca ccccgggcat ggcgcaacac ctccgactct
                                                                     1080
ggggaggagt tgagtccagg cccctgatgc tgcggcggtc ttccgttgcc gaattcacc
                                                                     1139
```

```
<210> 5284
<211> 2035
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (735)...(1156)
<223> similar to gi30474 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5284
                                                                       60
tttttttttt ttagetttgt eagteettta ttetetetag aggagggget eagtatatea
                                                                      120
cagcagtggc tgatgteggg tgcttgccac agctcagcac tgctctaata actcatccta
                                                                      180
accacaccaa geettgetga gacctetgag daateecace aggagataca gtgaggteda
gccactcagg ccacacagcg aacaggaggc agggctggta tgggtgcagg tgccaacccc
                                                                      240
gactgtgccg cetetegget aageacetgt geagtgactg agtgggeteg caaacagagg
                                                                      300
                                                                      360
getetgeagg tggageacce caggeaagte cecaccatea geeccattet geaggegegg
ccceggggcc agggatggga gggtcttgcc gggcatccag cgaggagact gcatattccc
                                                                      420
tgcccaatct ggcttcacgg cggcggaact gacgccacgt cccagggcgt tcggggctgc ;
                                                                      480
                                                                      540
caggectggt gageacegeg gacateteag atggeegtte tgeaggttga ggeecteggt
                                                                      600
gecagegice cegigggeag tietgigget teceiggeee aigtegicet eitggeagig
gccacatcac agcaccaggt gggatcaaag gggagggcag ctccccaggt ggacctgagc
                                                                      660
                                                                      720
tteteacaet etgaeaagee etegeetget gateeaagae acagtggeet ttgaaatteg
attteettee eeagggggge ttegggatee tggaggagat gtgtgteaac taegtgeact
                                                                      780
                                                                      840
actaccccca gacgcagctg gagctctgca agagcgctgt ggacgccggc ttcctgcaga
                                                                      900
agtactteca ceteateaac aggtteaaca aegaggatgt etgeacetge eeteaggegt
                                                                      960
cegtgtetea geagtteace tetgtteeet ggaacteett caacegegae gtactgaagg
                                                                     1020
ccctgtacag cttcgcgccc atctccatgc actgcaacaa gtcctcagcc gtccgcttcc
agggtgaatg gaacetgeag eccetgeeca aggteatete cacactggaa gageecacee
                                                                     1080
cacagtgccc caccagccag ggccgaagcc ctgctggccc caccgttgtc agcattggtg
                                                                     1140
                                                                     1200
ggggcaaagg ctgaggggg acctactcct cccctcctc catgctgtcc ctgtgggctc
acaceggeae tgtgeaetet actetgegae gateeceatg gaacageeet geaegeeeag
                                                                     1260
gatgaagggg ccagaccacg ccctgcctg agaccacggt ccaatccagc cttcttcccc
                                                                     1320
cagggtcccc tgcatggctg agagggtgtg ggtgccctgt tgacctaccc tggaccgagt
                                                                     1380
```

```
1440
ggaccacqac ctcgtccatt taaacccggc tgactcagtg cagggacagc ccgcacagtg
                                                                     1500
gtccagggtc cagccctccg ccagccctgt tccgcctcac tgggtgtggc ctggcttctg
                                                                     1560
ggacaggcac catgctgggc cggggtgtgg aatcaccggg aacgcccccg cccccgcccc
getgeteeg gtgtgeageg ggtgegggtg eegettaaac attteeetge tgagtggete
                                                                     1620
                                                                     1680
gtgtttcaca gtgggcggct tccctgcgac ggaggcagga ccaggcattt agctagttag
                                                                     1740
agactegeet gggaaattge tecatteetg agtaaacaga tattttegee cacetaaagg
                                                                     1800
qaaqeeetga caacaaetat caecaaaaga egaggeggea aagateeage ggggettetg
                                                                     1860
ggcgccggtt ccacgtgggg tggaattatt agcaccagct tgcttctctg ccggtggggc
cagcgctgaa cagaccgggg tggagtcagg gctgtgcttt ccgcgtggtt ctgccactta
                                                                     1920
gggagtgtgc cttgggcggg ccatttcaca ttcctgaccc tcacttttct catctgtaaa
                                                                     1980
                                                                     2035
accaggetga tgeegtgegg getaatgage caataaaget cacacttggg etgge
```

```
<210> 5285
<211> 1560
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(1146)
<223> similar to gi2656015 in the genepept database release 114;
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5285
gaggagcaat teetgaagag eteceacagt tggacagaga gaccetgtge cagtggagca
                                                                       60
cactetecta teetggeetg gtgaaggage tgtgtgeeet etteattgge tetgagetee
                                                                      120
                                                                      180
ttccaaaaga tgaattaaat gatctgatcg accgagcctt cagcagattc cgtcacagag
aagtggtcca totgtccagg ttgaggaatg ggctgaacgt gttggagctg tggcatggcg
                                                                      240
tcacatatgc atttaaggac ctgtccctgt cctgcacaac acagttcctg cagtacttcc
                                                                      300
                                                                      360
tggagaagag ggagaagcac gtcactgtgg ttgtaggaac atctggggac acaggaagtg
                                                                      420
ctgccattga gagtgttcaa ggggcaaaga acatggacat tatcgttctg ctgcccaaag
gtcactgcac aaagattcag gagctccaga tgacaacggt gctgaagcag aacgtacatg
                                                                      480
tgtttggagt ggagggaaac agcgatgagc tcgatgagcc gatcaagact gtgtttgccg
                                                                      540
                                                                      600
atgtggcttt tgtcaagaag cacaatctga tgagcctgaa ttcgatcaac tggtcccggg
                                                                      660
teetggtgea gatggeeeat caettetttg ettaetteea gtgtaegeea teettggaea
                                                                      720
cacateceet acceetggtg gaggtggttg tgccaacagg ggetgeeggt aacettgcag
                                                                      780
ctgggtacat tgctcaaaag ataggcctgc ccatccgtct ggtcgtggca gtgaaccgca
atgacatcat ccacaggact gtccagcagg gagacttctc tctctctgag gctgttaaat
                                                                      840
                                                                      900
caaccttggc atcagctatg gacattcagg tgccctacaa catggagagg gtgttctggc
                                                                      960
tgctctctgg ctctgacagc caggtgacaa gagccctcat ggagcagttt gaaaggaccc
aaagtgtgaa totgoocaag gaactgcaca gcaagottto agaggcagtg acatcogtgt
                                                                     1020
                                                                     1080
cagtgtcgga tgaagccatc acccagacca tgggccgctg ctgggatgag aaccagtact
                                                                     1140
tgctgtgccc ccactcagcg gtggccgtga actaccatta ccagcagata gacaggcagc
                                                                     1200
ageceaggta caggeaatgg gggeetggge caetgaggga ceatttgaat tteaggggee
ctettettet ccaageagtg ggagagacag gactacgaaa aaatggetgt aatggagtgt
                                                                     1260
                                                                     1320
gatgggtgct gtgtggaact gtgccttgga aactgtgggc ccagaagagg gagcgtgaca
gatateceag ggacagecat ggteagaggt ggtggetgag etggeeteea accaggagga
                                                                     1380
                                                                     1440
gcagtttgcc aggtagcgtc attgtagcaa taagttcaag gtgccaattg tctgtctgtg
                                                                     1500
tetetgteet ceatacecee ceatecetaa actteetetg titettatte etectecaee
tteteettte ceatetetet atteteteat tggeeteegg etgeeaeetg ceeceateee
                                                                     1560
```

```
<210> 5286
<211> 845
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (776)...(390)
<223> similar to gi458230 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5286 ctggaaaata cataaaaaca tatgtatcac cagtaaatga atcagtaaag tacaatataa 60 cacaaaagaa aaagaaatat tgcttgattt tttccaataa aagcaagggt aataaaaaca 120 180 tttttagtaa gaaaatctat catttttatt ttaaaaatct ttcaatttta aacatcatta ccaacacatt aaaagtatta tcaataagtg cctttacaat ttcaagcaaa agctactgtg 240 ttttccttat tggaaatact gctttcagtc atcttttttg tctgaggtac tctcttcatg 300 cttttcaggg ctgactttat tactggcggt ggagggggtt gtctggactt cttttggtaa 360 tgaaaacaca tggcacgtct ggaggtctag gtatgttgta aatatcttag catattctgg 420 atgetttaag geaaaacttt taaatteete ataggaaatt gagteeeett gggetattte 480 540 cttgaagaga ccagaaacat caaggtcagg cactccaagg gaagcctgta gaatggtgga 600 quactettee teegttatgt agecateete ateaaegtea aacagettaa atgecacetg 660 gatgatetee tetgtgttgg aagggttgea caagacagee aggecaatea catacteteg gaagtcaatg ctgccatcat ggttcctgtc aaagagtgca aaaagttgtc tcaagacatc 720 780 tgaaacaggc aactttaaat acttggcgaa ttcttcaatt ccaattcttc ctccttttga ggaactcgca atagatgcat attcatccaa atgcttacga acaccatccc aatctaattt 840 845 caatt

```
<210> 5287
<211> 1973
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1829)
<223> similar to gi2988397 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5287
gaaaggctaa ccggtggttt ggggttgctc cccctaaatc tggaaaaatg aacatgaaca 60
tccttcacca ggaagagctc atcgctcaga agaaacggga aattgaagcc aaaatggaac 120
```

```
agaaagccaa gcagaatcag gtggccagcc ctcagccccc acatcctggc gaaatcacaa
                                                                      180
atgcacacaa ctcttcctgc atttccaaca agtttgccaa cgatggtagc ttcttgcagc
                                                                      240
                                                                      300-
agtttctgaa cgctgggaag aggtccctgc tcatcagcag gcggacaggc ctggggctgg
                                                                      360
ccagcotgoc gggccotgtg aagagotact cocacgocaa gcagotgocc gtggcgcacc
                                                                      420
geocgagtgt ettecagtee eetgacgagg acgaggagga ggaetatgag cagtggetgg
                                                                      480
agatcaaagt ttcaccccca gagggagccg agactcggaa agtgatagag aaattggccc
                                                                      540
getttgtgge agaaggagge eeegagttag aaaaagtage tatggaggae tacaaggata
                                                                      600
acccagcatt tgcatttttg cacgataaga atagggggga attcctctac tacaggaaga
                                                                      660
aggtggctga gataagaaag gaagcacaga agtcgcaggc agcctctcag aaagtttcac
                                                                      720
ccccagagga cgaagaggtc aagaaccttg cagaaaagtt ggccaggttc atagcggacg
                                                                      780
ggggtcccga ggtggaaacc attgccctcc agaacaaccg tgagaaccag gcattcagct
                                                                      840
ttctgtatga gcccaatagc caagggtaca agtactaccg acagaagctg gaggagttcc
ggaaagccaa ggccagctcc acaggcagct tcacagcacc tgatcccggc ctgaagcgca
                                                                      900
agtecectee tgaggeeetg teagggteet tacceceage caccacetge eeegeetegt
                                                                      960
ccacgcctgc gcccactatc atccctgctc cagctgcccc cgggaagcca gcctccgcag
                                                                     1020
ccaccgtgaa gaggaagcgg aagagccggt gggggcctga agaggataag gtagagctcc
                                                                     1080
cacctgctga actggtgcag agggacgtgg atgcctctcc ctcgcctctg tcagttcagg
                                                                     1140
acctcaaggg gctcggctat gagaagggga agcctgtggg tctagtgggc gtcacagagc
                                                                     1200
tttcagacgc ccagaagaag cagctgaagg agcagcagga gatgcagcag atgtacgaca
                                                                     1260
tgatcatgca gcacaagcgg gccatgcagg acatgcagct gctgtgggag aaggcagtcc
                                                                     1320
aacagcacca gcacggctat gacagtgatg aggaggtgga cagcgagctg ggcacctggg
                                                                     1380
agcaccagct geggegeatg gagatggata agaccaggga atgggeegag cagetgacaa
                                                                     1440
agatgggccg gggcaagcac ttcatcggag acttcctgcc tccagacgag ctggaaaagt
                                                                     1500
ttatggagac cttcaaggcc ctgaaggagg gccgtgagcc tgactactca gagtacaagg
                                                                     1560
agttcaaget gaetgtggag aacategget accagatget gatgaagatg ggetggaagg
                                                                     1620
agggcgaggg gctgggctca gagggccagg gcatcaagaa cccagtgaac aagggcacca
                                                                     1680
ccacagtgga cggcgctggc ttcggcattg accggccggc ggagctctcc aaggaggacg
                                                                     1740
acgagtatga ggcgttccgc aagaggatga tgctggccta ccgcttccgg cccaacccc
                                                                     1800
tgaacaatcc cagacggcct tactactgag tgttctggaa atacatactt tctgaatgac
                                                                     1860
caaccgtccc tggactgtgg aatgttccgg cctgcatttc tgcccacccc ttccgttgtc
                                                                     1920
acgagtgccg tgccgtgtaa taaagtccca gtgctcatcc accacaaaa aaa
                                                                     1973
```

```
<210> 5288
<211> 684
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (207)...(402)
<223> similar to gi5630082 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
agccagacat gatcacccgt ttggaagggg aggaggagtc tcagaattct gacgagtggc 420
agctccaagg aggcacctct gcagaaaatg aagaatctga cgtaaagcct ccagactggc 480
caaacccaat gaatgctacc tcccagtttc ctcagcctca gcactttgac agctttggcc 540
tccgtctgcc tcgggatatc acagagctgc ccgagtggag tgagggggtac ccttctacat 600
ggccatggct tcccagggta tgacctctcg gctgatgaca tagctgggaa gtttcagttc 660
agccgggcat gcgcgcagtt acga
```

```
<210> 5289
<211> 4583
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1598)
<223> similar to gi505102 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5289 egegtgteta egeggaegea eeggetaage tgettetgee geeggeeggee geetgggaee 60 ttgeggtgag getgegeggg geegaggeeg eeteegageg eeaggtttat teagteacea 120 tgaagetget getgetgeac eeggeettee agagetgeet eetgetgace etgettgget 180 tatggagaac cacccetgag getcacgett catccceggg tgcaccaget atcagegetg 240 cctccttcct gcaggatcta atacatcggt atggtgaggg tgacagcctc actctgcagc 300 agctgaaggc cctgctcaac cacctggatg tgggagtggg ccggggtaat gtcacccagc 360 acgtgcaagg acacaggaac ctctccacgt gctttagttc tggagacctc ttcactgccc 420 acaatttcag cgagcagtcg cggattggga gcagcgagct ccaggagttc tgccccacca 480 tectecagea getggattee egggeetgea eeteggagaa eeaggaaaae gaggagaatg 540 agcagacgga ggaggggggg ccaagcgctg ttgaagtgtg gggatacggt ctcctctgtg 600 tgaccgtcat ctccctctgc tccctcctgg gggccagcgt ggtgcccttc atgaagaaga 660 cettttacaa gaggetgetg etetaettea tagetetgge gattggaace etetaeteea 720 acgecetett ecageteate eeggaggeat ttggttteaa ecetetggaa gattattatg 780 tetecaagte tgeagtggtg tttggggget tttatetttt etttteaca gagaagatet 840 tgaagattct tettaagcag aaaaatgage atcateatgg acacagecat tatgeetetg 900 agtogottoc otocaagaag gaccaggagg agggggtgat ggagaagotg cagaaggggg 960 acctggacca catgattect cagcactgca gcagtgagct ggacggcaag gcgcccatgg 1020 tggacgagaa ggtcattgtg ggctcgctct ctgtgcagga cctgcaggct tcccagagtg 1080 cttgctactg gctgaaaggt gtccgctact ctgatatcgg cactctggcc tggatgatca 1140 ctctgagcga cggcctccac aatttcatcg atggcctggc catcggtgct tccttcactg 1200 tgtcagtttt ccaaggcatc agcacctcgg tggccatcct ctgtgaggag ttcccacatg 1260 agctaggaga ctttgtcatc ctgctcaacg ctgggatgag catccaacaa gctctcttct 1320 tcaactteet ttetgeetge tgetgetace tgggtetgge etttggeate etggeeggea 1380 gccacttctc tgccaactgg atttttgcgc tagctggagg aatgttcttg tatatttctc 1440 tggctgatat gttccctgag atgaatgagg tctgtcaaga ggatgaaagg aagggcagca 1500 tettgattee atttateate cagaacetgg geeteetgae tggatteace atcatggtgg 1560 tcctcaccat gtattcagga cagatccaga ttgggtaggg ctctgccaag agcctgtggg 1620 actggaagtc gggccctggg ctgcccgatc gccagcccga ggacttacca tccacaatgc 1680 accacggaag aggccgttct atgaaaaact gacacagact gtattcctgc attcaaatgt 1740 cagccgtttg taaaatgctg tatcctagga ataagctgcc ctggtaacca gtctctagct 1800 agtgcctctt gccctctct cacctccttt tctctcagtg actctggaac ctgaatgcag 1860

```
cttacaaqac aaqcctgact tttttctctg attaccttgg cctcctcttg gaaccagtgc
                                                                     1920
                                                                     1980
tgaaaggttt tgaatccttt acccaacaat gcaaaaatag agccaatggt tataacttgg
                                                                     2040
ctagaaatat caagagttga atccatagtg tggggcccat gactctagct gggcaccttg
                                                                     2100
qacetecage tqqccaataq aagagacagg agacaggaag cetteccatt ttttcaaagt
                                                                     2160
ctgtttaatt gcctattact tctctcaaag agaacctgaa gtcagaacac atgagcaggg
tgagaggtga ggcaaggttc atcctgaatg ggagaggaag tcgaaccact gctgtgtgtc
                                                                     2220
                                                                     2280
ttgtcaggat gctcacttgt tcctactgag atgctggata ttgattttgt aacagcacct
                                                                     2340
ggtgtttcac ggctgtccga gtgagctaac gtggcggtgt ggctgcctgg acctcctctt
                                                                     2400
tcaggttaac gctgacagaa tggaggctca ggctgtctgc aagaaaacag ttggtttggc
                                                                     2460
tgtgattttg acctectett ecceaetgee atettetaag agaetttgta getgeeteet
                                                                     2520
agaagcacat tetgagcaca tttgagacet etgtgttaga ggggagaetg cacaaactat
cctccccag gttgagacgt ctgcagagtg gcaagctgac ttgtagaaat ggggtgccat
                                                                     2580
                                                                     2640
ttatgctcta cttaqacaaq qqtaatcaga aatggaatca gtgcaggcaa aatttaggat
                                                                     2700
ttgccgcttc cataaatcaa agcatgacta atagggggtc tctgaaatgt aagggcacaa
                                                                     2760
acttcactta gggcatcgca gatgtttgca gaatggttgg cctaatgatt atgctacaga
tgggttttaa atgacccgtc taggttactg cttccttgca aaaaaagtcg aatcctgcat
                                                                     2820
tgaattgaat atgaatttct ctaactctct ccagaaaatg gatggagata acttgtcttt
                                                                     2880
aaaactgtag gccagcctta gccactgtgg agcccttgcc tccgagctct ggcttcaagg
                                                                     2940
ggagetette tecaggitea etaggigaat igalitatta tiateatati galaatgiga
                                                                     3000
gattetttag ecaetttggg gageetgtet etecagaage etttettagt ggtgeecaeä
                                                                     3060
gttggagccc aggggccatg tttgcaaact gattcatgtg catggctgac aggagtactg
                                                                     3120
gttcactacc aatgcctgag cttttctctt acatagaaaa actgtccact ctcagtaatc
                                                                     3180
acaagcagca teegttttgt tttetettet tgggagacat etgteaaace aggaatatte
                                                                     3240
ttgaaaagaa cgtgagcagg aaaaactgct ggtgatactt tttttaagtt ttgttttat
                                                                     3300
cttgcctgtt ggcttcaata catttgagaa tacgctgaag agggaaaatt tcagtgatgg
                                                                     3360
agattetaga ttaaatatea ggaetgattt eetggtggga ttatggteea gttttaeeaa
                                                                     3420
agaaccaatt ccttgaatgt tggaatctaa ctttttatat tgtcattatt attgttgttt
                                                                     3480
ttaaacggtt ctttgtcttt tctgttttat ttttctcaag ctgctttcag gagctagcag
                                                                     3540
aaaataactc aaagttgaag actctggaag attttgcttt aacctaactc gcattgatgt
                                                                     3600
attaaattta taattttago attoccaata gatoctatoa ttocttaaac ataatacoot
                                                                     3660
ttgtcttgga gtagaatact aagttagagt tagtggattt ctagtttagg agaggagctc
                                                                     3720
aaaactataa totttaacaa attgaaaaat gaaatagggt gttttccctt tttgtgcaca
                                                                     3780
cctatattac cttaagaaat ttccttccat agacagctgc ctcaaaggga aatcctcttt
                                                                     3840
aaaccgtagt tggcgcagag gtcagtccta gtcggagctt aggaggggcg gagacgctca
                                                                     3900
catcgtctga cttgagtcgc cactgattgt ggcaacagct ttgcctcatg agtcaaaaat
                                                                     3960
tggcaatttc ttttgatttt tagttgttga atttgctgtt tcaagcattt gtacatatta
                                                                     4020
gaagtetaag gagtageaag teagtgggag gaetttttea eeeetggeat tageagette
                                                                     4080
gacctcattt tccagatgca ccagctccta ttaataagtt agcaaggaaa gtgtatgtca
                                                                     4140
cgtgcaggaa cagtgaggca gggacagggg ttctgctcct tctcacttca ccaccggcac
                                                                     4200
acagettgee cetgtetttg cececaaagg tattttgtgt etagtgteaa attggageta
                                                                     4260
ttetteactg gteettaace ttgggtttta aaaagaagge ttetetgttt gggtagegta
                                                                     4320
agagctgagt atagtaagtc ctcttccaaa gagatggcaa tatgctgggc atctacttta
                                                                     4380
aaacaaagtt gtctgatttt tgcaagagag gttaggattt tattgttctt atttcccttt
                                                                     4440
acagttctgc agttccatca cagtattttt ttaaataact caggtgtatg agaagaaatt
                                                                     4500
agaaaagaaa attaacttat gtggactgta aatgttttat ttgtaagatt ctataaataa
                                                                     4560
agctatattc tgtaaaaaaa aaa
                                                                     4583
```

```
<210> 5290
```

<211> 827

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature <222> (19)...(492) <223> similar to gill10599 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5290 60 coggaattoc ogggtogact atttogtotg otgotggtgc tgtcattgcg coggoggotg cgggaagagc tggagaaagg ggccaaggct actgagagga ccttggtgta cccctggag 120 etgeccaagg ageccaceag tecceeette eggecetgte etgaaceaga tgagaaaett 180 tgggateetg teggttaeta etatteagat ggeteeetta agatagtaee tgggeatgee 240 300 eggtgecage ceggtggggg geceetteg ceacetecag geateceagg ceagectetg ccttctccaa ctcggcttca cctggggggg gggcggaact caaatgccaa tggttacgtg 360 cgettacaac taggagggga ggacegggga gggeteggge acceeetgee tgagetegeg 420 480 gatgaactga gacgcaaact gcagcaacgc cagccactgc ccgactccaa ccccgaggag tcatcaqtat gaqqqqaacc cccaccqcqt cggcgggaag cgtgggaggt gtagctccta 540 cttttgcaca ggcaccaget acctcaggga catggcacgg gcacctgctc tgtctgggac 600 agatactgee cageacecae eeggeeatga ggacetgete tgeteageae gggeaetgee 660 720 acttggtgtg gctcaccagg gcaccagcct cgcagaaggc atcttcctcc tctctgtgaa tcacagacac gcgggacccc agccgccaaa acttttcaag gcagaagttt caagatgtgt 780 gtttgtctgt atttgcacat gtgtttgtgt gtgtgtgtat gtgtgtg 827

<210> 5291
<211> 1284
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (38)...(692)
<223> similar to gi168747 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5291 ccagagectg getgaggtee tgeageaget gggggeetee tetgagetee aggeagtaet 60 cagetacate ttecceaett aeggtgteae eeccaaecae agtgeetttt eeatgeaege 120 cctgctggtc aaccactaca tgaaaggagg cttttatccc cgaggggtta ccagtgaaat 180 tgccttccac accatecetg tgattcageg ggctggggge getgteetea caaaggecae 240 tgtgcagagt gtgttgctgg actcagctgg gaaagcctgt ggtgtcagtg tgaagaaggg 300 gcatgagetg gtgaacatet attgeeceat egtggtetee aacgeaggae tgtteaacae 360 ctatgaacac ctactgccgg ggaacgcccg ctgcctgcca ggtgtgaagc agcaactggg 420 gacggtgcgg cccggcttag gcatgacctc tgttttcatc tgcctgcgag gcaccaagga 480 agacctgcat ctgccgtcca ccaactacta tgtttactat gacacggaca tggaccaggc 540 gatggagege taegteteea tgeeeaggga agaggetgeg gaacacatee etettetett 600 cttcgctttc ccatcagcca aagatccgac ctgggaggac cgattcccag gccggtccac 660 catgatcatg ctcataccca ctgcctacga gtggtttgag gagtggcagg cggagctgaa 720 agggaaagcg gggcagtgac tatgagacct tcaaaaactc ctttgtggaa gcctctatgt 780 cagtggtcct gaaactgttc ccacagctgg aggggaaggt ggagagtgtg actgcaggat 840

```
coccactcac caaccagtte tatetggget geteceegag gtgcetgeta eggggetgae
                                                                      900
catgacetgg geogeetgea ceettgtgtg atggeeteet tgagggeeca gageeceate
                                                                      960
cccaacctct atctgacagg ccaggatatc ttcacctgtg gactggtcgg ggccctgcaa
                                                                     1020
                                                                     1080
ggtgccctgc tgtgcagcag caccatcctg aagcggaact tgtactcaga ccttaagaat
cttgattcta ggatccgggc acagaagaaa aagaattagt tccatcaggg aggagtcaga
                                                                     1140
                                                                     1200
ggaatttgcc caatggctgg ggcatctccc ttgacttacc cataatgtct ttctgcatta
                                                                     1260
gttccttgca cgtataaagc actctaattt ggatctgatg cctgaagaga ggcctagtta
                                                                     1284
aatcacaatt ccgaatctgg ggcc
```

```
<210> 5292
<211> 4119
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1772)
<223> similar to gi3327130 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5292 tgtggcgacg gcggcagctg tggccccggc gccagcgccc ggcacggaca gcgcctcttc 60 ggtgcactgg ttccgcaaag ggctgcgact ccacgacaac ccggcgttgc tggcggccgt 120 gegeggggeg egetgegtge getgegttta cattetegae eegtggtteg eggeeteete 180 ctcagtcggg atcaaccgat ggaggttcct acttcagtct ctggaagatt tggacacaag 240 300 tttaaggaaa ctgaactccc gcctgtttgt agtccgggga cagccagccg acgtgttccc aaggetgtte aaggaatggg gagtgaceeg ettgacettt gaatatgaet etgaaceett 360 tgggaaagaa cgggatgcag ccatcatgaa gatggccaag gaggctggtg tggaagtagt 420 gacggagaat teteatacee tetatgacet ggacaggate attgagetga atgggeagaa 480 gccaccctt acatacaagc gctttcaggc catcatcagc cgcatggagc tgcccaagaa 540 gccagtgggc ttggtgacca gccagcagat ggagagctgc agggccgaga tccaggagaa 600 ccacgacgag acctacggcg tgccctccct ggaggagctg gggttcccca ctgaaggact 660 tggtccaget gtctggcagg gaggagagac agaagetetg gecegeetgg ataageaett 720 ggaacggaag gcctgggttg ccaactatga gagaccccga atgaacgcca actccctcct 780 ggccagecce acaggectea geeectaeet gegetttggt tgteteteet geegeetett 840 ctactacege etgtgggace tgtataaaaa ggtgaagegg aacagcacac etcecetete 900 cctatttggg caactcctat ggcgagagtt cttctacacg gcagctacca acaaccccag 960 gtttgaccgc atggagggga accceatctg catccagatc ccctgggacc gcaatcctga 1020 ggccctggcc aagtgggctg agggcaagac aggetteeet tggattgatg ccatcatgae 1080 ccaactgagg caggagggct ggatccacca cctggcccgg catgccgtgg cctgcttcct 1140 gacccgcggg gacctctggg tcagctggga gagcggggtc cgggtatttg atgagctgct 1200 1260 cctggatgca gatttcagcg tgaacgcagg cagctggatg tggctgtcct gcagtgcttt ettecageag ttettecaet getaetgeee tgtgggettt ggeegtegea eggaeeeeag 1320 tggggactac atcaggcgat acctgcccaa attgaaagcg ttcccctctc gatacatcta 1380 tgagccctgg aatgccccag agtcaattca gaaggcagcc aagtgcatca ttggtgtgga 1440 ctacccacgg cccatcgtca accatgccga gaccagccgg cttaacattg aacgaatgaa ~ 1500 gcagatttac cagcagettt egegetaceg gggactetgt etactggcat etgtecette 1560 ctgtgtggaa gacctcagtc accctgtggc agagcccagc tcgagccagg ctggcagcat 1620 gagcagtgca ggcccaagac cactacccag tggcccagca tcccccaaac gcaagctgga 1680 agcagcegag gaaccacctg gtgaagaact cagcaaacgg gcccgggtgg cagagttgcc 1740

```
aaccccagag ctgccgagca aggatgcctg agactgcaga gcccttgctc cgtgagcaaa
                                                                     1800
gcctgggtgc ccaagcagcc accgcagcag cagagtacaa cctgcagaga agctgatcac
                                                                     1860
                                                                     1920
cgggcagaga tagagcgagc atgtgtgtgt gtgtgcgcgt gtgcagagga gggagtggtg
tgcctgtttg tgtgtgcatg catctgttga cactcatgat tctgaatgtt gcctgggctg
                                                                     1980
                                                                     2040
qqqqaqtacc tgtagcacgc cagtgctgtt tcccggcctc cagacacaag gctcgaggtt
                                                                     2100
atggcagaga ctttcagctg agacctgttc ctgcaagcca gctgccttgt ctgaacagaa
cgtagtggta ggaccctagc tgggattctg gcatctgcct ccctagacct ccttccctcc
                                                                     2160
                                                                     2220
ctcctcacgt caggetgtgg agcaggagca cagcagttct ggctgttgtc caaagcatgg
                                                                     2280
gattetggag geageeagag eeetgetgag tteetgettt etgacetgga ggetgageag
gccggagtgg atggatgctg tccagacgta gccacctggc ctctgtttct tattttaaaa
                                                                     2340
ttctctgcta ctgggctcag tcccaggccc ttccttgggc ttctgggact gagcatgagg
                                                                     2400
ccatagacag atctaaaaag tttccaccac cctacagaag tacacacaga tacctgactg
                                                                     2460
gtgtggggta tgcctggtac tgtaatagga gcctaagaca gcacacctac cttttcagga
                                                                     2520
tttagaacct aaaattagaa agagaatccc agctgtcatt gttccttccc cagaagctaa
                                                                     2580
gagccagcct cagagcctac ccaggagctg tgaaggggca agggtcaaac tgactcactc
                                                                     2640
taccaggagg agaccaggtt gcagtggcgt aaggccccct ggtttctctg gccacactcc
                                                                     2700
                                                                     2760
aagggcacca cagtgcttgc cagtgaagga cagctgacac ccagccaggg aaaccattct
aggetttatt etgttggget tecagggeet gteetggaet tgteageate eagaetgeea
                                                                     2820
                                                                     2880
tqtcaqctat cccaqtagct gagctccaag gactcacgca gagggactca aggatgggga
                                                                     2940
ctgccagggg cagttggcaa aagtccaagt agagattaca cccaacacac cattccttcc
                                                                     3000
aggagcagta ggtgggaggt ttgacccaga gaagccaatc cttgcattcc aggagtggcc
                                                                     3060
tgtgcctccc acctettect teccaetgee aaaggeetgt gttgagaaag atgteatgea
aaaggacgac ggtggccaac taaagcaagt cttccttcca ccctgtggcc tgcacttgag
                                                                     3120
ccacaaagtg tgtgtgtgtg tgtgtgcgtg tgtggtacgt gtgtgtgtgt gtggctatga
                                                                     3180
                                                                     3240
ggctgattcc tgtttggatt tttgtcctca cgtgtatcat taagctggcc tttgggcctt
tteettteta ecteceetgt gaeettteet ageeteagat etgttaatte ttttggeece
                                                                     3300
agecetytee eteactytee tetyteetty gaecagaace etygygteag acceatetee
                                                                     3360
tgtagetgte cateacaetg acaggettet teetgagata teeteaggtt tteteageea
                                                                     3420
gagagetgee tttagagtee aactgttgta egtatgteae etteaetaga aatgteecat
                                                                     3480
                                                                     3540
categtggga ggggagcagg gcacagggga tggtgtgcat tcagagcatt gggttggggg
cttccctgtt ccctcagccc cagtcgagag gaaagagaat cgggccactg ccagaaagag
                                                                     3600
                                                                     3660
agtcaagcaa acctggaagg gcaaatctga gagtgggaag gccaaaggcc gaggcccaga
                                                                     3720
tttagtattc actagcagcg ccttcgggta gcaggatgat tccttttcct gcctgtctgc
                                                                     3780
tgctggctct cttccctaag gtacaggttg gcaggaccac ctccgcctac ttctccacca
tecetageat gecagecegt teccagatea acetgecagt ggagteagge agtgeactee
                                                                     3840
tggagccaag agggaagggc agggtagaga gggtatgtcc agtagcctgg agctccatgg
                                                                     3900
tggetteatg ectecettet eccageteag gtggeeetga gggeteeete ggaacagtge
                                                                     3960
ctcaaatcct gacccaaggg ccagcatggg gaagagatgg ttgcaggcaa aatgcacttt
                                                                     4020
atagagattt tetattgetg ggaaggtgtg ttteteecac aatttgtttg tgaatattea
                                                                     4080
cttgttttat aaatgtctga cctgtcttga aaaaaaaaa
                                                                     4119
```

```
<210> 5293
<211> 614
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (615)...(187)
<223> similar to gi5262513 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5293
                                                                       60
ttttttttta ctaaacactc aataacttta tttgcctttg gctggctcct tggtgtgggg
cagggtaggg tttggcaaca gcctgggctt catgcgccct ctggtggacc tcagaggcac
                                                                      120
gaactggaat ctgggccaaa cctgaggact taacagtcaa tagcctagga gggtcgcagc
                                                                      180
getecteagg tetgeacece agacceaaca teaggggacg gggeactetg ggaggaagee
                                                                      240
etgaacetet ggeteteata etegecegtg ttggacaace geatgttetg eegageette
                                                                      300
atctgcttca cacggtcctt gtccacttcc cgcttggtga ggatgaagag gaggatacca
                                                                      360
                                                                      420
caagggaagc cgatggccca ggccagtccc acagctttca tggggttctt gcccctcttt
etgggaatgt attecagete eggggatagg ggtteaggtt eeteettgee etetggggag
                                                                      480
etgtggettt geagggeeg ggteetgtta tgagaageet tgttagetgt ggeteetgeg
                                                                      540
agaatccccc ggaggacgcg ggcatttctc gccccccggc ccttcagcgc cgtagcagct
                                                                     600
accaccgccg ccat
                                                                      614
```

```
<210> 5294
<211> 1730
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(584)
<223> similar to gill22398 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5294
ggggcactat tatcacacca gatgaataca ctggaaaaat aatgatgctt tgcgaggctc
                                                                       60
gaagagcagt tcagaagaat atgatattta ttgatcaaaa tagagttatg cttaaatatc
                                                                      120
tettteettt gaatgaaatt gtggtagatt tttatgacte tttgaaatce ctatettetg
                                                                      180
gatatgetag ttttgattac gaagatgeag getaceagae tgeagaaett gtaaaaatgg
                                                                      240
atattetaet gaatggaaat aetgtagagg agetagtaae tgttgtaeae aaagaeaaag
                                                                      300
ctcattcaat tggcaaagcc atatgtgaac ggctgaagga ttctcttcct aggcaactgt
                                                                      360
ttgagatago aattoaagot gotattggaa gtaaaatoat tgcaagagaa actgtgaaag
                                                                      420
cctataggaa aaacgttttg gcaaaatgtt atggtggtga tattacccga aaaatgaagc
                                                                      480
ttttgaagag acaagcagaa gggaaaaaaa agctgaggaa aattggcaac gttgaagttc
                                                                      540
caaaagatgc ttttataaaa gttctgaaaa cacaatcttc taaataattg gtgggaaaac
                                                                      600
aaagaatttt cattgcaatt tgtaatatgc tgacaacaga aagaaaatta taaaatttgc
                                                                      660
ttgttacttt cagggtattc aggttcaaat aacctactag tctttcgttg aaagggagta
                                                                      720
gttagtgggt aggcaagagc ttagattttg aagccatgtt gcctgctctc aaatatctgt
                                                                      780
tecaaceact cactagtaag gtgacegtgg ceagattaac etttgtttee tetteagtaa
                                                                      840
aatcgagatt atactactac ctacataagt tgttgttgtg aagattaaat gaggtaatac
                                                                      900
gttaaatatt cagaggtgca agacacatag taagcactca attgtaacta cagttaagtc
                                                                      960
cttaaatgcc atcgaaaggt tcttagaaac tgactttaag caaaatgaca cgtagcacaa
                                                                     1020
tgttcttgaa tgatgtcatt tccttaagtg gtttgtaaca tcgatgagga aaaaaaattg
                                                                     1080
gtttatgcgt catttcattt tatttttatt tattttttga gacagagtct tgccctgtcg
                                                                     1140
eccatgetgg agtgeaatgg cacaateteg acteaetgea acetetgeet cetgggttea
                                                                     1200
agagattete etgeeteage etceattaca ggegtgeace accatgeteg getaattttt
                                                                     1260
tgtatettta gtagagtegg ggttteacea tgttggeeag getggtettg aacteetgae
                                                                     1320
ctcgtgatcc acccaccgtg gcctcccaaa gtgctgatta caggtgtgag ccaccatgcc
                                                                     1380
```

```
cagccatgtc atttcattta aagtcacaat ttccatgaat ctcaacaagt gaggacctgc 1440 tatattttgt tgcatgcagt ttttctttac ggacactaaa aggccccata cttaagattc 1500 catctacttt aagtttaaag gattttcaga atcaccttaa gtgtcaaatt tgttagcagg 1560 attaattgat atgaattcac ttattaaaca gtaaactcaa ataacataga catcaaataa 1620 cagacatctg ctctagttaa tgataaaatg tttatagatt ttatcaggtg aggagtttga 1680 aactaaatgg tttacatcta aattaagggc aggagctgtc tttcagacat 1730
```

```
<210> 5295
<211> 699
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (700)...(409)
<223> similar to gi3747107 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5295 aacacattta aaaacatttt ggcagctttt tagttgattc attaaacttg ctttattcat 60 caatattaaa gtcgggaaag taaaaaatgg taaatagcca tggataaaca ttcaaaaata 120 gcatttttga tgaccttaaa ttattttaa agccttcagt acctaaaatt ttatatatat 180 actttcatat tececeetet aataetttee ttgeattaae eetggageat acacaaettt 240 tgaaaaagtc aaaaaatcga qattqttttc ccaqqqtaaa qataqtttqa aqqctqqaat 300 aataaggatt tgctgaatgt atcgttgctg ctgttgttaa gatctcaagt caatccctcc 360 ctggttgctg aagccatatc accctagtgg atccatcact catcactaca ccatccgata 420 cacagggtca ccaactctca ggcttccaat tttttccact gaataataqa tcccaaaaaq 480 tggagacaac ttgtacaatt ccctctcaga aggatcacac aggcggtagc tcttcagggt 540 gtccagtggc tgtttcctgt ctatgactcc agtgtctggg tccaccgttg tcaaaataca 600 cctggggcat gccattacct ttttcacttc tacactacca attaggagtt catcccaggt 660 atcctcctca aaagcatcac agccggtcac cacaatatt 699

```
<210> 5296
<211> 1810
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (45)...(1432)
<223> similar to gi3168866 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5296
                                                                       60
gqaqqcaqqa ggagcaaqaa gtggaaacaa gagcagtgcc gtcccctcct cctccccca
tcgtgaagaa gccattgaag caaggtgggg ccaaagctcc aaaagaggct gaggctgagc
                                                                      120
cagccaagga gacagcggcc aagggccatg gccaagggcc agcccaaggc agggggactg
                                                                      180
tggtgcgcag ctcatactcc aagcccaagc ggccacaacc cagcagggaa attggcaaca
                                                                      240
tcatccgcat gtaccagage egecegggee cegtgeetgt gecegtgeag ecatccagge
                                                                      300
ctcccaaagc tttcctgagg aaaatcgacc ccaaggacga ggctctggcc aagctgggta
                                                                      360
tcaacggtgc ccactcgtcc ccgccgatgc tgtcccccag cccaggaaag ggccccccgc
                                                                      420
cagctgtggc tectegacec aaggeeeege tacagettgg geeetetage tecateaagg
                                                                      480
                                                                      540
aaaagcaggg gccccttctg gacctgtttg gccagaagct gcctattgcc cacacccc
                                                                      600
cacctccacc agegecacca etgectetge eegaggacce agggaccett teageagage
gtcgttgctt gacacagccc gtggaggacc agggggtctc cacccagcta ctcgcgccct
                                                                      660
ctggcagcgt gtgcttctcc tacaccggca cgccctggaa gttgttccta cgcaaggagg
                                                                      720
                                                                      780
tqttctaccc acgqqaqaac ttcagccatc cctactacct gaggctcctc tgtgagcaga
tectaeggga cacettetee gagteetgta teeggattte eeagaatgag eggeggaaaa
                                                                      840
                                                                      900
tgaaagacct gctgggaggc ttggaggtgg acctggattc tctcaccacc accgaagaca
                                                                      960
gegteaagaa gegeategtg gtggeegete gggacaactg ggecaattae tteteeeget
                                                                     1020
tettteetgt etegggegag agtggeageg aegtgeaget gttageegtg teeeacegtg
                                                                     1080
ggctgcgact gctcaaggtg acccaaggcc ccggcctccg ccccgaccag ctgaagattc
                                                                     1140
tetgeteata cagetttgeg gaggtgetgg gtgtggagtg ceggggegge tecacectgg
                                                                     1200
agetgteact gaagagegag cagetggtge tgeacacage cegggeaagg gecategagg
                                                                     1260
cgctggttga gctattcctg aatgagctta agaaggactc cggctatgtc atcgccctgc
                                                                     1320
gcagctacat cactgacaac tgcagcctcc tcagcttcca ccgtggggac ctcatcaagc
                                                                     1380
tgctgccggt ggccaccctg gagccaggct ggcagtttgg ctctgccggg ggccgttccg
gactetttée tgeegacata gtgeageegg etgeegetee egacttttee ttetecaagg
agcagaggag tggctggcac aagggtcagc tgtccaacgg ggaaccaggg ctggctcggt
                                                                     1500
gggacagggc ctcagaggtg aggaagatgg gagagggaca agcagaggca aggcctgcct
                                                                     1560
gagactgagg aaggaaaggg gtttgaccac teeegagget gecatgeggt gggaccacee
                                                                     1620
tgctgtccgt ctcctgtggc tgcccctctg cccgctcctg atggctcgcc ttgtctctcc
                                                                     1680
ageaagactg tgeacteett geaggeaggg getgggetgg atgetgetet tgtgteeeae
                                                                     1740
gtggtactta gttcaaggct gccccagcag atgcttaata aacagctctt cactttcctg
                                                                     1800
                                                                     1810
aaaaaaaaa .
```

```
<210> 5297
<211> 1247
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)...(1077)
<223> similar to gi1216313 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5297
gaaacttttg aagaattaat tgactgctct ggggggtgta ttctaggagg ttttggtggat 60
gcacacacac atccagtatg ggctggtgaa agagttcacg aatttgcaat gaagttggca 120
ggagccacct acatggaaat tcaccaggcc ggaggaggga tccactttac cgtggagcgc 180
acgcgccaag ccacagagga ggagctgttc cgctccttgc agcaacggct ccagtgcatg 240
atgagggctg gcaccacgct ggtggagtgc aagagtggat atggcctcga cctggagacc 300
```

```
gageteaaga tgetgegegt gattgagege geeeggeggg agetggaeat eggeateteg
                                                                      360
gctacctact qcggggctca ttcagtgcct aaaggaaaaa ctgctactga aqctgctgat
                                                                      420
gacatcatca ataaccacct cccaaagctg aaggaacttg gcagaaatgg ggaaatacac
                                                                      480
gtggacaata tagacgtatt ttgtgagaaa ggtgtctttg atctcgattc caccagaagg
                                                                      540
attetteaac gtggaaaaga tatagggtta cagattaact tecatgggga tgaactecac
                                                                      600
ccgatgaagg ctgctgagct tggggctgaa ctgggagcgc aggcaatcag ccacctggaa
                                                                      660
gaagtgagtg atgaaggcat cgttgccatg gcaacggcca ggtgctctgc catccttctg
                                                                      720
                                                                      780
cccaccacag cctacatgct gagactgaaa caacctcgag ccaggaagat gttagatgaa
ggagtaatag ttgctctggg aagtgatttc aaccccaatg catattgctt ttcaatgcca
                                                                      840
atggtcatgc atctggcctg tgtaaacatg agaatgtcca tgcctgaggc cttggccgct
                                                                      900
gccaccatca atgcagctta tgcactggga aagtctcaca cacacggatc gttggaagtt
                                                                      960
ggcaaacagg gagateteat tateateaat teateeegat gggageattt gatttaceag
                                                                     1020
ttcggaggcc atcatgaatt aattgaatat gttatagcta aaggaaaact catctataaa
                                                                     1080
acatgataga tttgaaaaga gaagactttt tgactatatg aaataagtca atatagttat
                                                                     1140
attaaaagtt aaaacacctt aatatttaca agaattatat cacttaaacc taaatgtact
                                                                     1200
tcaatgtctt tttaagtcac tcaaaaaacc caagggatag atttatt
                                                                     1247
```

```
<210> 5298
<211> 1689
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1692)...(1434)
<223> similar to gi5788103 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5298
tcaagcactg aagacgcaaa actgaaacaa caggcaaggg cgagtggaac gtgggatggg
                                                                       60
gagcaaaagg ctggaaggag gggggctggg cccacacctg gaagaaccca catccttgca
                                                                      120
geeteeggtg getgeaacat ettggeeeet geagatettt teagaggtee ggeacaatga
                                                                      180
ctccacagag ggctgactgg ttccatgatg cttaagaggt taggaagctt gtaggaggca
                                                                      240
egectgactt gecacteect ceacecagge etgactatet gaggaceaat teacacacet
                                                                      300
ggagccccga gtagcagcct gaaggaatgc taaggaggta ggtgagggag tggggggcag
                                                                      360
gecettgece ceatttettg attgtataae aetteattaa aataaaatea egeagtgeea
                                                                      420
tettttatta gaeattttaa taccatatea aaacacettg actaatgaag aaagetttte
                                                                      480
toccaagett tgaacatttt tttaaacatt ttataagttt ttttttgtat tttaatatat
                                                                      540
aaatacagaa acctatcttg catgggctga tgccacgtgt gaacatcaat ggctaaaatg
                                                                      600
tteteaaaca tagtgeetga aaacaggggt agetgtacat atttettagt aagtetttt
                                                                      660
ttgtttaagt tttctgaaaa aaaaaatcca cgagggccta agaataatgt tcaggcattt
                                                                      720
ttgcaggaca cttgtgattg ttaaatcctc tgaactgacc ggaaccagga ggaaagaagg
                                                                      780
gaaaagagat gggatcagta ggaagaaagt totcaatggg ttgttttttg gcaatgaagt
                                                                      840
caagatatta gggtctcaag gggagaaaag agcaaaaaac cagccagaaa aatagaggga
                                                                      900
aaaaaccaaa caaacccaaa gtagagaagt tggtggtgga gagggccagt tggggcaggg
                                                                      960
gaagagaccg tgtgctcgcc cgccgtcaga aggctggcag cgaggcctta gctgtgttcg
                                                                     1020
tctgtcactg agtgggttat ggctgggcag caaacagcaa gctgtaaaca tcacgaggga
                                                                     1080
aaacaccagt cgacactaga ctttttttt atataatttt tttttgtaaa cactttaaag
                                                                     1140
acagacccac aatgcettte aaagatgaaa aagaaaatge cettteeete etgggetgag
                                                                     1200
gggtgagggg aaggatagca gttgattcat tcttctctca aacttgctct catccaattt
                                                                     1260
```

```
ggtgtcctca gggaggaagg gagaaccatg atctggaagt cagtgcagaa ggggtgccct
                                                                     1320
gttcccgctg gtgtcccaag ctcagctctg ccccagggtc cggtgagcct cctccctgga
                                                                     1380
gcaggggcgc tctgtccctt tgagaggagt cagcaagcaa gcccgcaggt cagtccgcag
                                                                     1440
ggtgttccgg acaagatctg ttcacttcaa accacgagtc tatgcagctt ttgtgataga
                                                                     1500
tgcacaggca gggcagcctg gctatcgtgt ccccctgcag cagctcctcc aggcagatca
                                                                     1560
cacactcacc cgcgtcttta gtcagcacat catcgttgta ggagaggcga ggtttgctca
                                                                     1620
aacacattat aaagtgcatt tccatctcgt caaaagccac agacttggag caaatggggc
                                                                     1680
acttgaacc
                                                                     1689
```

```
<210> 5299
<211> 1460
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1252)...(353)
<223> similar to gi1293835 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5299
ttttttttt ttggccaaac agattggtca ttattgtaca catagctgga agggagggt
                                                                      60
ggtcccgggg taaggacagg gctgcccaat atttgggggg aggaagggac tcttcttcca
                                                                      120
aatgggettg teegggaace ggggteeegg ggagetggge geetggteea catggaeeee
                                                                      180
ctccacctcc ccacatacgc tgtggaagaa gggcaggagt gagaaatgct gggggaggac
                                                                      240
gaccettigg tetgagatgt ggaggtgate ataacagtte eegeeegetg getgttitgt
                                                                      300
tgactttgga gaggccttcc cggaacccag agtccgtcat tacttgctcc atctgaacat
                                                                      360
cctcctcgtc ctcctggggc agctgcaggt acgggttgtt ccctgtgggc tggaacttgt
                                                                      420
agcccgtgag cacgaagaag gccagggtgg agccctccac caagagctgg tacagccact
                                                                      480
gccactgaaa gggcacagcc acctgcagca ggatggcgat gatgcgggtg aagtagacgt
                                                                      540
agcagatgac catgacatag taatgccgga acagcttcag cttggccagg ttcactgcca
                                                                      600
cettecegte tgtgccagae geateetgga gatgeeggat ggaccagaet aeggggaaca
                                                                      660
ggatggcacc acagcagatg aggtccacca ggaacaaaat ctccttccac agcacgtagt
                                                                      720
egetggegee tteetegegg gaetegatga tgatgtagge caegttggee aggaeetgea
                                                                      780
tggggatcac gatcccaaag accttcttct ccttatccga caggacgtac ttgatgaagg
                                                                      840
cccagcctga gccaatcagg gcgatggtga tgaagaggag ggcgcccttc agcaggtgtg
                                                                      900
cgatgtagta catgacggca aggccttcga tggggtggcc ctggctgttg atgaagtagt
                                                                      960
agttgatgct gtggaagagg agagagatgc tcttggtgaa ggccaaggcc gccatgagcc
                                                                     1020
agtggatett gaagaegetg taegtgttee tgeagaggat ggaeaeceag aagatgeeag
                                                                     1080
cggccaggaa gcaggcggac atgaccatgt agagcttgaa aaggggcatc tccgctgccg
                                                                     1140
acaggaagee ateggggtte tteteeegga teateacegt gatgtegaat ggatgeteet
                                                                     1200
ttcctggcac tgaattgttg cagttgtgga agttcaggct gtactggcct, tcttccgcct
                                                                     1260
gagageegat caeeaegtgg aaaetgaagt tgtaggagtt gttgaggtgg etcaggeeca
                                                                     1320
acaccaggte ettgteette ceactaggae eetgaateae tgegggtgtt gaettggget
                                                                     1380
tgctggctgc agaggtccct ccgccatcca ccttgcgggg gactgtggcc tgtggcttcg
                                                                     1440
ggaattccac cgcactggac
                                                                    1460
```

```
<210> 5300
<211> 2335
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(976)
<223> similar to gi2622298 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5300
gatettttga tttcatacat ctagaccett ttggaacate agtgaattat ctagattetg
                                                                       60
cattcagaaa tataagaaac cttggcatag tgtcagtgac ttctacagat atcagttctt
                                                                      120
tatatgecaa ggeacageat gttgeeegge gteactaegg atgtaacatt gteegaactg
                                                                      180
aatattacaa ggaactagca gccagaattg ttgtagctgc agtggcaaga gctgcagccc
                                                                      240
gatgcaacaa aggcatagaa gtactgtttg cagtggctct ggaacatttt gtgttggtag
                                                                      300
ttgtgagagt tttgagggga cctacttcag cagatgaaac agccaagaag attcaatacc
                                                                      360
tgatccattg tcagtggtgt gaagagagaa tttttcagaa ggatggtaat atggtagaag
                                                                      420
aaaacccata tagacagctg ccttgtaact gtcatggaag catgcctgga aagacagcaa
                                                                      480
tagaacttgg acctctgtgg tcaagttccc ttttcaatac tggattcctc aaaagaatgc
                                                                      540
tatttgaatc tetteaceat ggtttggatg acatteagae cetaataaag acattaatet
                                                                      600
ttgaatcaga gtgtacgcct caaagtcagt tttcaattca tgcatcttca aatgtcaaca
                                                                      660
agcaagaaga aaatggtgta tttattaaaa ctacagatga caccacaaca gataattaca
                                                                      720
ttgcacaagg aaagagaaaa agtaatgaaa tgatcacaaa tttaggcaag aagcaaaaga
                                                                      780
ctgatgtcag tactgaacat cctccctttt attacaacat tcacagacac agcattaaag
                                                                      840
gaatgaatat gccaaagtta aaaaagtttt tgtgctattt atctcaagca ggctttcgag
                                                                      900
taageegaae teattttgae eeaatgggtg taegeaeaga tgeaeetetg atgeagttta
                                                                      960
aatctatcct tttaaagtac agcaccccca cctacactgg aggacagtca gaaagccatg
                                                                     1020
tccagtcagc atctgaagat acagtaactg aaagagttga aatgtcagtg aatgacaaag
                                                                     1080
cagaagcaag tggctgcaga agatggtaaa cgtagagaag aattggttct caggtgtctg
                                                                     1140
tatagatggc ctaatagttc tctataccaa ctgtagttct ttttctgttc tttcaattca
                                                                     1200
gtagagtaaa aataaaaaac agtgtcattt tcattcagaa actgagcagt ttctaactta
                                                                     1260
gctggtttgg gagctttgct ttccaagttt ttttttgttt taaggcaaac ttaaaatttt
                                                                     1320
aatggaaaca tttcatatga agccaagtct cactgagatc accctactgc ttaataattc
                                                                     1380
agaaaatttt cacatgcaaa gtgtttggaa ttttatgtat gttatgaaag ccatctttta
                                                                     1440
caattettaa: teacatetet geetaaaetg atteatgatg tittatgtitt cetgittgta
                                                                     1500
gtgtacaaaa tgaagctgaa ggctcacatg ttaaaatgac cctgaataga ataggaagaa
                                                                     1560
caatgttctt acaggtcata atgtatttca caattaaaaa actaaaatat gtacccattt
                                                                     1620
ttaagaaatc atacttetet eeacattgat etttteattt ettaetaget tttaagaaat
                                                                     1680
taaatacttg cetgagatag aaatacttta tttttgtaac tttaaggtet aaatgactaa
                                                                     1740
acttcaaagt aagattttgt cagaataaat tgagaccatt aatctaatat aatacttgtt
                                                                     1800
catgagcact gaaatcctga agaggagaga tttggttata aattaaaaag gttgggtgat
                                                                     1860
cttaagtgcc tcagttaatg cacgtacagt attcatttgg ttggttgtac tacctctcag
                                                                     1920
aagtaaaatt tgtcacctta tggaatgaga gtttttgggt ttgggggttg tttttttgtt
                                                                     1980
gttgcttggt ttggtatttt tggttttgtg tgtatttgta taaattttct gtataattag
                                                                     2040
cccaggctga tgtaactata aaaattagtt gaaaaaaaaa atattgtttc cttaatggaa
                                                                     2100
ttctcacttc atttgaatat aagattttgg atgaaaggat ttggtataaa gtttgggttt
                                                                     2160
ttgtctcaag gatttgatcc atatttatcc ctaaatattt cttaagggat gtaacttttt
                                                                     2220
ataaccatta agtgggggga agggggtgga gggggtggta tgtactcata tttattaqtc
                                                                     2280
gttaacatct ttocttgtct agcattattt ctgagtataa cgatcatctt aagcc
                                                                     2335
```

```
<210> 5301
<211> 872
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (873)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (5) ... (727)
<223> similar to gi212260 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5301
gcacctgcgg caggacaaag agcatgacgt ctcgctggag atccaggatc tgcggctgga
                                                                       60
ggactatggg cgttaccgct gtgaggtcat tgacgggctg gaggatgaaa gcggtctggt
                                                                      120
ggagctggag ctgcggggtg tggtctttcc ttaccagtcc cccaacgggc gctaccagtt
                                                                      180
caacttccac gagggccagc aggtctgtgc agagcaggct gcggtggtgg cctcctttga
                                                                      240
gcagetette egggeetggg aggagggeet ggaetggtge aacgeggget ggetgeagga
                                                                      300
tgccacggtg cagtaccca tcatgttgcc ccggcagccc tgcggtggcc cgggcctggc
                                                                     360
acctggcgtg cgaagctacg gccccgcca ccgccgcctg caccgctatg atgtattctg
                                                                      420
cticgctact gccctcaagg ggcgggtgta ctacctggag caccctgaga agctgacgct
                                                                      480
gacagaggca agggaggcct gccaggaaga tgatgccacg atcgccaagg tgggacagct
                                                                      540
ctttgccgcc tggaagttcc atggcctgga ccgctgcgac gctggctggc tggcagatgg
                                                                      600
tagogtocgo taccotgtgg ttoaccogca toctaactgt gggcocccag agcotggggt
                                                                      660
cegaagettt ggetteeeeg accegeagag eegettgtae ggtgtttaet getacegeea
                                                                      720
gcactaggac ctggggccct ccctgccgc attccctcac tggctgtgta tttattgagt
                                                                      780
ggttcgtttt cccttgtggg gtggagccat tttaactgtt tttatacttc tcaatttaaa
                                                                      840
ttttctttaa acattntttt actatttttt gg
                                                                      872
```

```
<210> 5302
<211> 2454
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2057)...(1052)
<223> similar to gi4378887 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5302
                                                                       60
aaaattttca ttaatcaaac tccgtaaaga aaactttcca acagccagga tatggaggtt
gttttacccc tttttcccct taaaattttt ttttttccct aaagecttaa atttctgtag
                                                                      120
                                                                      180
ggaggttqtc ccaatatgtc cccccccaa aataaagttc ctttccaaaa attcccaagt
                                                                      240
aggttttaat teggeeect ataaggaaaa aaatattace ttgcaageee gggtaaaatt
                                                                      300
tggcccccc aaggattett taaaacggcc ccccttttt ttttttttc catccataaa
catatgtctt tattctcttt ctgtacatat gggcaatgat aaagcttaaa gatgcatgtc
                                                                      360
ctaagaaata tgcaaaaaca atgaatttac ataaataatt tatacttcag aaaattaaag
                                                                      420
ttgaaaaata ttttccacat tattagagtt cacagtattt aaatcaagct ttcccactta
                                                                      480
tactccagac tatattgtct tagcagagag tgataaaatc taatcaggaa taaaatgatc
                                                                      540
aagtttctgt ttttattcag tgcacgagta gacgctattt cagtatcagg ccgcgccaag
                                                                      600
tgtcgaggct gcagcctctc atcctgaccc ttcccctcct gagtggctgt gacccagcag
                                                                      660
aggtcactgg cgtggaatgg ttacagcgtc accaaaccac tccacggtgg acacattcaa
                                                                      720
ccgagcggta acatctggtg gtctgatgcc tcatttccaa gtaatacttt ttatagccct
                                                                      780
gaaaatggaa accttggcat ctaaacaaac agagctgaac atgtgaacac taggacaagg
                                                                      840
cactgtacta tggggtttgg tttctttatg ggaaaggtgt ttgcatagat tgctagctat
                                                                      900
ttagtgtgca ggaaaacaga gccccagcg tgcatggctt tgtgaggggt gaagctgcat
                                                                      960
ggtgctccct cagccccaag agagcgcagt ctctcattct ccagccccag ccttgtgggc
                                                                     1020
tqtcccqctq qtqctqtcct ttaqaacccc tacaqqaqag ttttttqctc aaaaaqctqc
                                                                     1080
aggicaaaac ggacccagac ctccccggtg gggacctcat gcagcagcag tcggcgggtc
                                                                     1140
atagggeett tgettteetg ttetgttega atttttgeea etggaattte agtaegaeee.
                                                                     1200
aggaaatcat ctggtgaaaa ctggtctctg tcaaacaggg tgagacacag cacgtcttgg
                                                                     1260
tagagateet taataaagaa etggeagtta aaatteeact tgggattgag tgtgteetgg
                                                                     1320
atggteetgg tggtgtaget etgggageee atgetgattt cacagtatgg gttgetettt
                                                                     1380
ccatttggtt tgcaggcttt taattctgta gcttcaatga catgcaccat caggcgccca
                                                                     1440
atgeetgaag tettttggga gegggettgg taagetttet caegettett etteteggtg
                                                                     1500
tegatgtact geteagaege egeettgate ttetgeacee aggeggteet eteattaatg
                                                                     1560
ttgtctgttc ggagggtgta gacccgatca atgtgggaaa tgtggaagac aggctcatcg
                                                                     1620
ctggaagggt ctgtgggcag tttcaccaag acttcattca ggaaaatggg cgttttatac
                                                                     1680
attitigaatt gagcattigga citicgagctig aaaagtitict cagagccaga ggaaacagca
                                                                     1740
aactgettga ceatgtaggt aagaageagg aagteattga agaggaatee gtgeagttee
                                                                     1800
ttgttgctct tggtcttgta taatttccca ctgtgtaaga gcttccgggg ccccaggcag
                                                                     1860
ttggtgagag agttgaaaat aagttgctcc gcgaggcctt cacactgcac gtgcgcctgg
                                                                     1920
atecacteca gteggteega gttttccttc tecegaacte ceteatteac ttgagageac
                                                                     1980
ageteetetg ceegetegag ggecagettt agggaggaat ggtetgeatg geteteeggg
                                                                     2040
gtgttctcca gaatctggaa aagagtgggc agtgtcacat gggggagctg cgtctctcac
                                                                     2100
etgeceacet ggacettege aggacegete etceaacece atgttatgga etgettecat
                                                                     2160
gecetggaaa egeggeggtg aacaagaega caettteege eettgagaaa etegtaetee
                                                                     2220
cacaagttct tggggacaca gggacaggta acgctgctgt gacaaggtga cagtgctaaa
                                                                     2280
cggatcaagt gctctgaact gtgtgggtct ctggttgctc tccgactggc tcccggtaat
                                                                     2340
aggegggage etecegaete etteegaaat ttaageeatg taagggtgeg eeeteetgta
                                                                     2400
taaactggct gcagctgtgg taagtgtgaa cttgctgaat agcaatggtt cata
                                                                     2454
```

```
<210> 5303
<211> 1751
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (50)...(796)
<223> similar to gi4102980 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5303
                                                                       60
taagaaaaca aactttetee gttetatgae tgetetettg gaeceagete agattgagga
acgagacaga cgacgacaaa aacaattaga gcatcagaaa gccatcactg cccaggtaga
                                                                      120
agagaagcgc aggaagaaac aactggagga agagcaaaga aagaaggaag aacaagaaga
                                                                      180
ggagcttcgc ttagcacagg aacgtgaaga gatgcagaaa cagtatgaag aagacatact
                                                                       240
                                                                       300
taagcaaaaa caaaaggaag aaatcatgac tctcaagaca aatgagctat tccagacaat
gcagcgagca caggaactgg cacagagact aaaacaagaa caaagaatcc gagaattggc
                                                                       360
gcaaaaggga catgacactt ctagactgat taaaaatctt ggtgttgata caatacaaat
                                                                       420
ggaatataat gcatctaaca tttcaaattc aagacatgat tctgatgaaa tcagtggtaa
                                                                       480
aatgaataca tatatgaatt ctacgacttc ttctaagaag gatactggtg tgcaaacaga
                                                                       540
                                                                       600
tgacttaaat ataggaatat tcaccaatgc agaatcacat tgtggatcat taatggagag
                                                                       660
ggacatcaca aattgttcat ctcctgagat ttcggcagaa cttattggac agtttagcac
                                                                       720
caagaaaaac aagcaagaac taactcagga taaaggagcc agcttagaaa aagaaaacaa
teggtgtaat gaccagtgta atcagttcac aagaatagag aaacaaacaa aacacatgaa
                                                                       780
gaaatateet aaaaggeetg attggaatat aaataageea eetaaaaggt atatteeage
                                                                       840
                                                                       900
atcagaaaag taccctaaac agcttcaaaa gcagagagaa gaaaaaaaag taaggaggca
gatggaattg cttcatttgg tagaaaaaaa taatcctggg cacctctctc aaaacagagg
                                                                       960
catttcacca gaaatttttc attcatctca tcaagaaacg gagtcaaagt tgaggtggca
                                                                     1020
                                                                     1080
totagtoaaa aaggaagaag agcototgaa tattoattoa ttoagoaagg aaaggtotoo
atcatcacca gttccagtag tgaaaaacag aacccaacaa actcaaaata cattacattt
                                                                     1140
accactaaaa aacagtagct atgagagaga gaatttgatc tcaggaagta atcaaacaga
                                                                     1200
attatcatct gggatttctg aatcatccca ttttattccg tatgttcgaa caaatgagat
                                                                     1260
ctattacett gatecegatg caccattgte tgggeettea acceaggace etcagtacea
                                                                     1320
aaattcacaa gactgtggcc aaaaacgaca gctatttgat tctgactgtg tcagggatcc
                                                                     1380
acttettaat cetaacatgg tgaaaaatag ggategacag caagcaatce ttaagggact
                                                                     1440
ttcagaactg agacagggcc ttctccagaa gcaaaaggag ttggaaagta gtctcctgcc
                                                                     1500
ctttagctga aaatcaagaa gagagttttg gttcttcatt ttaaatgtag aaaatcaaat
                                                                     1560
cetteacatt tgatttgtgt ettecaaatt ataaaatgtg etcaetgget caactgtatt
                                                                     1620
tttcaaatag cctagattta cttattttt taaatgctca ttaaaaactt gtatactatg
                                                                     1680
tagtaaaatg ctgtacttgt tctatacaat aaaacagata cttcttttgt aaaagcttag
                                                                     1740
tagtaaaaaa a
                                                                      1751
```

```
<210> 5304
<211> 1110
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(649)
<223> similar to gi3327100 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5304
ctccaaggag catctctgta tgacttgctc ggcatggaag tagagttgag ggaaatgaga 60
acagaagcca ttgccagacc tctggaaata aacgagactg aaaaagtgat gagaattgca 120
```

```
180
ataaaagaga ttttgacaca ggttcagaag actaaagacc tgctcaataa tgtggcctct
gatgaagcta atttagaagc caaaatcgaa aagagaaaat tagaactgga aagaaatcgg
                                                                      240
                                                                      300
aagcgactag agactctgca gagtgtcagg ccatgtttta tggatgagta tgagaagact
gaggaagaat tacaaaagca gtatgacact tatctggaga aatttcaaaa tctgacttat
                                                                      360
ctggaacaac agcttgaaga ccatcatagg atggagcaag aaaggtttga ggaagctaaa
                                                                      420
                                                                      480
aacactetet geetgataca gaacaagete aaggaggaag agaagegeet geteaagagt
                                                                      540
ggaagtaacg atgactcgga catagacatc caggaggacg atgaatccga cagtgagttg
                                                                      600
gaagaaaggc ggctgcccaa gccacagaca gccatggaga tgctcatgca aggaagacct
                                                                      660
ggcaaacgca ttgtgggcac gatgcaaggt ggagactccg atgacaatga ggactcggag
gagagtgaaa ttgacatgga agatgatgat gacgaggatg acgatttgga agacgagagc
                                                                      720
atttetetet caccaaccaa geccaatega agggtetgga aatetgaace eetggatgag
                                                                      780
                                                                      840
agtgacaatg acttctgacc cttttgccaa gggaccctgg cagattaaaa ccctcagact
tgtaggtaaa tgggaactta gaaggttagg aaggtaaccc ctgttttgtt tactaagctg
                                                                      900
gctggactca tgatcactga agcaatactt atttctgctt tagcctccta tgtttgcatt
                                                                      960
ccatgaagct taaataagaa ttgaagcaaa tccctaagat ttatttttt ccaccttatt
                                                                     1020
tatettetaa aaettgagga atgeatgtgt tettagtgat teacateeae gggacaaaaa
                                                                     1080
ctcaagaaga aataagagct gacgccacac
                                                                     1110
```

```
<210> 5305
<211> 1925
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1440)
<223> similar to gi5911316 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5305
atggcctgga acaccaacct ccgctggcgg ctgccgctca cctgcctgct cctgcaggtg
                                                                       60
attatggtga ttctcttcgg ggtgttcgtg cgctacgact tcgaggccga cgcccactgg
                                                                      120
tggtcagaga ggacgcacaa gaacttgagc gacatggaga acgaattcta ctatcgctac
                                                                      180
ccaagettee aggacgtgea egtgatggte ttegtggget teggetteet catgacttte
                                                                      240
etgeageget aeggetteag egeegtggge tteaaettee tgttggeage etteggeate
                                                                      300
cagtgggcgc tgctcatgca gggctggttc cacttcttac aagaccgcta catcgtcgtg
                                                                      360
ggegtggaga aceteateaa egetgaette tgegtggeet etgtetgegt ggeetttggg
                                                                      420
geagttetgg gtaaagteag ceceatteag etgeteatea tgaetttett eeaagtgaee
                                                                      480
ctcttcgctg tgaatgagtt cattctcctt aacctgctaa aggtgaagga tgcaggaggc
                                                                      540
tecatgacea tecacacatt tggegeetae tttgggetea cagtgaceeg gateetetae
                                                                      600
cgacgcaacc tagagcagag caaggagaga cagaattctg tgtaccagtc ggacctcttt
                                                                      660
gccatgattg gcaccctctt cctgtggatg tactggccca gcttcaactc agccatatcc
                                                                      720
taccatgggg acagccagca ccgagccgcc atcaacacct actgctcctt ggcagcctgc
                                                                      780
gtgcttacct cggtggcaat atccagtgcc ctgcacaaga agggcaagct ggacatggtg
                                                                      840
cacatccaga atgccacgct cgcaggaggg gtggccgtgg gtaccgctgc tgagatgatg
                                                                      900
cteatgeett aeggtgeeet eateategge ttegtetgeg geateatete eaceetgggt
                                                                      960
tttgtatacc tgaccccatt cctggagtcc cggctgcaca tccaggacac atgtggcatt
                                                                     1020
aacaatctgc atggcattcc tggcatcata ggcggcatcg tgggtgctgt gacagcggcc
                                                                     1080
tccgccagcc ttgaagtcta tggaaaagaa gggcttgtcc attcctttga ctttcaaggt
                                                                     1140
ttcaacgggg actggaccgc aagaacacag ggaaagttcc agatttatgg tctcttggtg
                                                                     1200
```

```
accetggeea tggecetgat gggtggeate attgtgggge teattttgag attaccatte
                                                                     1260
                                                                     1320
tggggacaac cttcagatga gaactgcttt gaggatgcgg tctactggga gatgcctgaa
                                                                     1380
gggaacagca ctgtctacat ccctgaggac cccaccttca agccctcagg accctcagta
ccctcagtac ccatggtgtc cccactaccc atggettect eggtaccett ggtaccetaa
                                                                     1440
                                                                     1500
gctcccaggg caggtgagga gcaggctcca cagactgtcc tggggcccag aggagctggt
gctgacctag ctagggatgc aagagtgagc aagcagcacc cccacctgct ggcttggcct
                                                                     1560
                                                                     1620
caaggtgeet ecaceeetge ceteceette ateceagggg gtetgaetga gaatggagaa
                                                                     1680
ggagaageta caaagtggge atccaageeg ggttetgget geagaagtte tgeetetgee
                                                                     1740
tggggtettg gecacattgg agaaaaacag geteaaagtg gggetgggae etggtgggtg
aacctgaget eteccaggag acaacttage tgecagteae cacctatgag getettetae
                                                                     1800
cccgtgcctg cacctcggcc agcatctcct atgctccctg ggtcccccag acctctctgt
                                                                     1860
gttgtgtgcg tggcagcctc caggaataaa cattcttgtt gtcctttgta aaaaaaaaa
                                                                     1920
                                                                     1925
```

```
<210> 5306
<211> 2679
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (269)...(908)
<223> similar to gi3786433 in the genepept database release 114
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5306
acgtttttag aagacagcta ccaagtatat atttcggggt tgtagagttc aaataataaa
                                                                       60
tetetagett cataatgttt etaagettet eteeetitta aaatttttgg tattagggat
                                                                      120
ggattgataa ctttaatgga ccaagtggtc tctttattgc ggtaagtaaa ccttttgatt
                                                                      180
tatttaatat totatacatt tttctgtttt ttgtatatct ttaaatatat atacactatg
                                                                      240
gcttatatat cttaaggtgt tgtttttaat ttcaacaaag gcagggaaag gaattcttcg
                                                                      300
                                                                      360
aacaatacgt gcctccaaca atgcccttgc agatcttgtt cctgtagatg tagttgtcaa
catgagtett geggeageet ggtatteegg agttaataga ceaagaaaca teatggtgta
                                                                      420
taattgtaca acaggcagca ctaatccttt ccactggggt gaagttgagt accatgtaat
                                                                      480
ttccactttc aagaggaatc ctctcgaaca ggccttcaca cggcccaatg taaatctaac
                                                                      540
ctccaatcat cttttatatc attactggat tgctgtaagc cataaagccc cagcattcct
                                                                      600
gtatgatatc tacctcagga tgactggaag aagcccaagg atgatgaaaa caataactcg
                                                                      660
                                                                      720
tetteacaaa getatggtgt ttettgaata ttteacaagt aattettggg tttggaatae
tgagaatgtc aatatgttaa tgaatcaact aaaccctgaa gataaaaaga ccttcaatat
                                                                      780
tgatgtacgg cagttacatt gggcagaata tatagagaac tactgcttgg gaactaagaa
                                                                      840
gtacgtattg aatgaagaaa tgtctggcct ccctgcagcc agaaaacatc tgaacaagtt
                                                                      900
                                                                      960
gcggaatata cgttatggtt ttaatactat ccttgtgatc ctcatctggc gcatttttat
tgcaagatca caaatggcaa gaaatatctg gtactttgtg gttagtctgt gttacaagtt
                                                                     1020
                                                                     1080
tttgtcatac ttccgagcat ccagcactat gagatactga agaccaagga ttcagcatta
gaacatctat acatatggtg atctaaatgt acaaaatgta aaatgtataa gtcatctcac
                                                                     1140
                                                                     1200
tttttgtcaa gacattaaac catcttagat cggagtgtga agtaaattat ggtatatttt
atgtaacatt ttaatgttta tgctcataaa acttagtgaa cacactgtgt tatgccagct
                                                                     1260
caaatctaca gtagccacca aaaccatgac ttaatatttt gagccctaga agaaaggggt
                                                                     1320
gtgctgagga caagagtggg gaaataggaa cactgaccag tataactgtg caattctgga
                                                                     1380
acatattaat taaaataata tgccttaaca tatagtgaat ttctaattct aatgttcagt
                                                                     1440
```

```
gcaatggaag acatttattt ggacagtaat actagcaaag ttggtagata tttgattctt
                                                                     1500
cattttttgt ttttttcatt agttgaagtg ggttttagtt ttgtttaaaa ttataaccag
                                                                     1560
                                                                     1620
cgtattttca catcattctg taagttaaat gatatcaaac atgaaagaga tgttctcatt
titctttttc tgattaaacg tctgatgcat atcatttttc tataagtaat cagttgcttt
                                                                     1680
                                                                     1740
taaaatcaga aggctatatt attctaatga ccctattcga tctaaatggg tttgagaatc
                                                                     1800
catatcagca acatacgtgt tttttgacag aaagtgaaaa caaattccgt aaaactgtta
gtatcaaaaa gaataggaat acagttttct tttccacatt atgatcaaat aaaaatcttg
                                                                     1860
tgagattgtt tatgttttga agcaggagga tttcttgaga tttgatggaa gtgggagttg
                                                                     1920
                                                                     1980
ggaaggattc accatacttg tgttctcctc cctttataaa ttttattcat aggactttta
aaaggettgt getatettte cagtgaaaac tgaaagtgea ttattatgga agaatgtatt
                                                                     2040
tgcaggtagt aatagcatta aaaaatatac tcgtgtgtaa acacatacta attttgacct
                                                                     2100
                                                                     2160
tgaaagatga attccttcaa gaaaaataaa ataatgctta agataatgtg tacgaaatta
                                                                     2220
aataaaggac tttatttaca tactacataa ggtagcaaac tgttgaatga gtttgaaggt
atcacttatt ttttatgcat gtgattttag ctttagaaag aaatgcgtta tagaaacaag
                                                                     2280
                                                                     2340
taatagcaag aaaattgatg tatattttaa tgatacatta aaattccctt ttaatcataa
tagttaactc tacttactgt tttaacatac atttgattta acaaattgtt cagcataaca
                                                                     2400
cttctaatta agtttatcaa gttgtactgt attagataat cagcagtgta tctggagtat
                                                                     2460
                                                                     2520
gtttaaagag aacagttcgc aatacaaaaa gttacatgga gctttacatc ttaactttct
                                                                     2580
ttgtcaattt aaatgcaatg gataaaaagg ttattttgct attgtgaaaa actaattgta
                                                                     2640
aaggaaatca cctactttca tgcaggtgta taatcttgaa aaggaaaaat gcttccatgt
                                                                     2679
tgaagccaga ttttctgtag taaaactttt aaatattat
```

```
<210> 5307
<211> 2119
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(2021)
<223> similar to gi4868122 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5307
tcaaacgaag ggagcggagc aaggaggaga aggtgcctga atgggaaccc cccgaagcgc
                                                                       60
ctgaaaagga gagacaggag gatgatgtcc cagctggagc tgctgagtgg gggagagatg
                                                                      120
ctgtgcggtg gcttctaccc tcggctgtcc tgctgcctgc ggagtgacag cccggggcta
                                                                      180
gggcgcctgg agaataagat attttctgtt accaacaaca cagaatgtgg gaagttactg
                                                                      240
gaggaaatca aatgtgcact ttgctctcca cattctcaaa gcctgttcca ctcacctgag
                                                                      300
agagaagtot tggaaagaga cotagtactt cototgotot gcaaagacta ttgcaaagaa
                                                                      360
ttettttaca ettgeegagg ceatatteea ggttteette aaacaactge ggatgagttt
                                                                      420
tgcttttact atgcaagaaa agatggtggg ttgtgctttc cagattttcc aagaaaacaa
                                                                      480
                                                                      540
gtcagaggac cagcatctaa ctacttggac cagatggaag aatatgacaa agtggaagag
atcagcagaa agcacaaaca caactgette tgtattcagg aggttgtgag tgggetgegg
                                                                      600
cagecegttg gtgeeetgea tagtggggat ggetegeaac gtetetteat tetggaaaaa
                                                                      660
gaaggttatg tgaagatact tacccctgaa ggagaaattt tcaaggagcc ttatttggac
                                                                      720
attcacaaac ttgttcaaag tggaataaag ggaggagatg aaagaggact gctaagcctc
                                                                      780
gcattccatc ccaattacaa gaaaaatgga aagttgtatg tgtcctatac caccaaccaa
                                                                      840
gaacggtggg ctatcgggcc tcatgaccac attettaggg ttgtggaata cacagtatcc
                                                                      900
agaaaaaatc cacaccaagt tgatttgaga acagccagag tctttcttga agttgcagaa
                                                                      960
```

```
ctccacagaa agcatctggg aggacaactg ctctttggcc ctgacggctt tttgtacatc
                                                                     1020
attcttggtg atgggatgat tacactggat gatatggaag aaatggatgg gttaagtgat
                                                                     1080
ttcacaggct cagtgctacg gctggatgtg gacacagaca tgtgcaacgt gccttattcc
                                                                     1140
                                                                     1200
ataccaagga gcaacccaca cttcaacagc accaaccagc cccccgaagt gtttgctcat
gggctccacg atccaggcag atgtgctgtg gatagacatc ccactgatat aaacatcaat
                                                                     1260
ttaacgatac tgtgttcaga ctccaatgga aaaaacagat catcagccag aattctacag
                                                                     1320
ataataaagg ggaaagatta tgaaagtgag ccatcacttt tagaattcaa gccattcagt
                                                                     1380
aatggteett tggttggtgg atttgtatae eggggetgee agteagaaag attgtatgga
                                                                     1440
agctacgtgt ttggagatcg taatgggaat ttcctaactc tccagcaaag tcctgtgaca
                                                                     1500
aagcagtggc aagaaaaacc actctgtctc ggcactagtg ggtcctgtag aggctacttt
                                                                     1560
teeggteaca tettgggatt tggagaagat gaactaggtg aagtttacat tttatcaage
                                                                     1620
                                                                     1680
agtaaaagta tgacccagac tcacaatgga aaactctaca aaattgtaga tcccaaaaga
cetttaatge etgaggaatg cagagecacg gtacaacetg cacagacact gaetteagag
                                                                     1740
tgctccaggc tctgtcgaaa cggctactgc acccccacgg gaaagtgctg ctgcagtcca
                                                                     1800
ggctgggagg gggacttctg cagaactgca aaatgtgagc cagcatgtcg tcatggaggt
                                                                     1860
gtctgtgtta gaccgaacaa gtgcctctgt aaaaaaggat atcttggtcc tcaatgtgaa
                                                                     1920
caagtggaca gaaacateeg cagagtgace agggeaggta ttettgatea gateattgae
                                                                     1980
atgacatett aettgetgga tetaacaagt tacattgtat agtttetggg aetgtttgaa
                                                                     2040
tattctattc caatgggcat ttatttttta tcctgtcatt aaaaaaaaa gactgttatc
                                                                     2100
                                                                     2119
ctgctacaca aaaaaaaaa
```

```
<210> 5308
<211> 1550
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (17)...(1495)
<223> similar to gi3327146 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 5308
gaatteegea egageteece cagggeetee teeettaggg geaateatge caceteetgg
                                                                       60
tgctccaatg ggcctagcac tgaagaagaa aagcattcct cagcccacaa atgccctgaa
                                                                      120
atcetteaac tggtetaaac tgeeegagaa caaactggaa ggaacagtat ggaeegaaat
                                                                      180
tgatgataca aaagtettea aaattetaga tettgaagae etggaaagaa eettetetge
                                                                      240
ctatcaaaga cagcagaaag aagcagatgc cattgatgac actctgagtt ccaaacttaa
                                                                      300
agttaaagag ettteggtga ttgatggteg gagageteag aattgeaaca teettetäte
                                                                      360
gaggttgaaa ttatccaatg acgaaatcaa acgggcaatt ctaacaatgg acgaacagga
                                                                      420
agatetgeec aaggacatgt tggaacaget ettgaaattt gtteetgaaa aaagtgacat
                                                                      480
tgacctattg gaggaacata aacatgaact ggatcggatg gccaaggctg ataggttcct
                                                                      540
ttttgagatg agccgaatta atcactatca gcaaaggttg caatcgctgt acttcaaaaa
                                                                      600
gaagtttgca gagcgtgtgg cagaagtgaa acctaaagtg gaagcaattc gttctggctc
                                                                      660
agaagaggtg tttaggagtg gtgccctcaa gcagttgctg gaggtggttt tggcatttgg
                                                                      720
aaattatatg aataaaggtc aaagagggaa tgcatatgga ttcaagatat ctagcctaaa
                                                                      780
caaaattgct gacacaaaat ccagcatcga caaaaacatt accettttgc actateteat
                                                                      840
cactattgtg gaaaataagt accccagtgt tctcaatcta aatgaagaat tgcgagatat
                                                                      900
tecteaaget gegaaagtaa acatgaetga getggacaaa gaaataagta eettgagaag
                                                                      960
tggcttgaaa gcagtagaga cagagctgga atatcagaag tctcagcccc cacagcccgg
                                                                     1020
```

```
agataagttt gtgtctgttg teagecagtt cateacagta gecagettea gettetetga
tgttgaagac cttctaqcag aagctaaaga cctgtttact aaagcagtga agcactttgg
                                                                    1140
ggaagaggct ggcaaaatac aaccagatga gttctttggc atttttgatc aatttcttca
                                                                    1200
agctgtgtca gaagccaaac aagaaaacga aaatatgaga aagaaaaagg aggaagaaga
                                                                    1260
acgtcgagct cgcatggaag ctcagctcaa agaacaacgt gaaagggaac gtaaaatgag
                                                                    1320
aaaaqctaaa qaqaataqtq aaqaaaqcqq aqaqtttqat qaccttqttt caqctttacq
                                                                    1380
ctcaggagaa gtgtttgaca aagacctttc taaattgaaa eggaategca aacgtattac
                                                                    1440
caaccagatg actgacagca gcagagagag accaatcaca aaacttaatt tctaattttc
                                                                    1500
catgaatact tttttttaga aagctcatta gcagccctct aaagtgactg
                                                                    1550
```

```
<210> 5309
<211> 593
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(392)
<223> similar to gi4680392 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5309
gtectageca ceggtgtete ettetacate egectetgeg eeggetgeca eeegegetee
                                                                       60
etcegcegce geogeettge tgetgetcaa agetgetgee geceettggg etaaaaggtt
                                                                      120
ttcaaatgga acattttgat gcatcactta gtacctattt caaggcattg ctaggccctc
                                                                      180
gaggtatcag cagctctgtc ctcagaatgg gtcccccact tcacacagtt gtaggatggc
                                                                      240
tacagcagct ccaagcagca cattcagagg aagaagaaaa aatgtttcat ttqtqtqqtt
                                                                      300
ttaagcataa agaagttgtt teecagaget etttgeeage tgteateeet caaaaeteae
                                                                      360
tggccacaat tgcttcacat gcacctgcct gaaccagcca ccagaggggg ttaggaccac
                                                                      420
cacagattga ctagatecta aggattetet acetgggget ggagtteggg teaggtgeee
                                                                      480
gggaagcact gtgcggtgtg ggaggatgaa tatgtgccaa tttggaaaga tgagtatttg
                                                                      540
tgggaaaatg aataaagcaa agtgtaaatc agaggtttaa gttaaaaaaa aaa
                                                                      593
```

```
<210> 5310
<211> 940
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(137)
<223> similar to gi3242244 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5310
gggcgtaagg gatcaggaag tgagcggctg cctccctcag ggctcctggc caaacctcca
                                                                       60
aggacagece ageceeccag gecaecagtg cetgagecag ceacaceceg gggtetecag
                                                                      120
                                                                      180
ctttctgcca acatgtaaaa cctttgagta catccagcct tagttcttgg ggtgcagtag
tatgtaccca agggcagatg cetettgggg aaggccatgg ggacetgaaa cattgcecca
                                                                      240
tggaaatgtc gaccctgtgc ggacattccg catactgcca tgaagacggt ctctgtgtcc
                                                                      300
teageteaag aateetgtag ettgteeeat cataateeat teaceegtte ateatgtgta
                                                                      360
ctgagcagct accatgttca aggtaatatg ccaggcgctg tatgtctcca ctgccaagta
                                                                      420
gaagtgactc aaaaccctct gacaaggata ttcccttggc tatggtcctg ccaggtgcag
                                                                      480
gcccaggccc atgaccccac ctttactaag cacaagtact tgccactgcc atcactgcca
                                                                      540
agtaactaga tgtctctgtt tccctgccaa tgatcctgca ggttctgccc ggtctggtta
                                                                      600
tetteetgtt cetgtageat agecaggeae tgecaateae etgtgeeece attgetgtea
                                                                      660
geagatgtet tgggteetga gtgtgggtat ceaettttae eegeteaetg ceaectgtgg
                                                                      720
acactetgtg tetaccetet gagtgggaac atacttetaa gatecetgea gtetetgtee
                                                                      780
tgtggtagac catctttttg taaactggga gcttcctctt ccctgtaccc tctgccccag
                                                                      840
tegtgacece etaaaagtta aggggtagtt ggcaceteet tattaatatg ecageetaga
                                                                      900
tccccccgg tggagggca aatggctgaa tccttgtgtg
                                                                      940
```

```
<210> 5311
<211> 902
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(903)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2)...(595)
<223> similar to gi5031291 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5311
ggagccctca ccaccccac cgcctggctg ctggggctgc tggcataagg ggcacgggga
                                                                       60
ggccatgccg ctgcacaggt atggggtggg tgaggcggcc gtaggcgctg aggccgggga
                                                                      120
ggcgaccete gggggtggcg gtgggggcgg etecgtgget teacecacet ceagetecgg
                                                                      180
cageteeteg aggggeactg agaggeegeg eteacteaag aggggeteea ageegtegge
                                                                      240
gtcctcggcc tcgctggaga agcgcatgaa gatggtgtcc cagagcttca cccagcgctt
                                                                      300
teggetgtet egggaeagga aagtggeeaa gtegetggee gteategtga geatetttgg
                                                                      360
getetgetgg gececataca egetgetgat gateateegg geegeetgee atggecaetg
                                                                      420
egtecetgae tactggtaeg aaaceteett etggeteetg tgggeeaaet eggetgteaa
                                                                      480
ccctgtcctc taccctctgt gccaccacag cttccgccgg gccttcacca agctgctctg
                                                                      540
ccccagaag ctcaaaatcc agccccacag ctccctggag cactgctgga agtgagtggc
                                                                      600
ccaccagage eteceteage caegeetete teageecagg teteetggaa ttetggeeet
                                                                      660
getgeeceet acceggeteg tteececagg ggtgageece geegtgtetg tggeectete
                                                                      720
ttaatgccac ggcagccacc ctgccatgga ggcgccttcc tggggttggc cagagggccc
                                                                      780
ttcactggct ggactggagg ctgggtggcc ggccctgccc cccacattct ggctccaacg
                                                                      840
```

```
<210> 5312
<211> 2604
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2607)...(909)
<223> similar to gi805095 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5312 60 tttttttttt ttactccaaa gggtttattg agacaagttt tcacatacaa gatggggaca 120 gaggggttgg ggcttataaa caggaacctg gaaggggacc gagggtgcag ggtagaacca aacaagagag tgaaataaat agagggaaag agtggagaca gggaggagac tgactgagac 180 240 catcacacag tgataatgcg ggtggggcgg cgccatgaaa atcccgttat ttatacagat 300 atacagggag ttcaggggga cccgaggccc actccaccct ccatgcccca gggaggggca caagaaagcc gtctctaccc atgggcgacc ccatggggcg ctgggagggc tgccctagga 360 gtgttgggca atccctggcc tggaagcctt ggttagtgtc tggaaagcag tggagagggc 420 480 eggagggag gggeageeag geeggggete agetetgagg eteceggetg ecaceettte teccageaca geteetgeec aggtetggga ggatggggga tggggggagea ggageteaag 540 gggagaacct ggcaccttct ggagtcttgg aaaaactgat ccctaaagac acceggccct 600 660 ggctgtgctg ccctctggaa agcagctctg ataccaggag cggctgtcag ggcacagggg gaaaccccga ggccatcctc gggggtgatt cctgaaaggg gcccatcccc aggctggatg 720 cttggggaag gcagccgttg gggagggatt cctggggaaa gggccgttag caccaccagg 780 840 ctccatggca aacagacaga ggccaggcct ctgcacctcc agcgaggctg ggagtcccct 900 cagececace tgeceggeec tacaceceag ceagegtgge ggecagggea gggecaggtg ggcatcatac gaagacettg gccagggcat cagcgccage actggcaatg agggcettge 960 tggggtggca ggcaacagcg tggatggcct cctcgtgctt cttgcggtgg gccgtgatct 1020 1080 cctgcacgca cgttttgttg tccaggctcc agagacgcag ggagcagtca tggcttcctg acatcaggaa tgcgccgttg gggtccacgg ctaggcaggt gactgcgtcc aggtgtgcaa 1140 ccatggagtg caccggctta cctgtccgat tgtccaggaa gcggatgccc ctgtcgtcgt 1200 . gggcggtgat ggtgagaggc tggtttggat gactcaccac ttggttgatc tgggttggac 1260 cgctgctgcc ccgggactcc agcgtgagga gggcactgcc aacctccatg tcatacaaga 1320 cggtgtcgcc agagcggaag gaggccacga tgtgggcagg ctcggtgctg gtgaaggcca 1380 ctgaggtggg gaccccgtgc tcgctggctg tggggaaggt gcagaggcag gccgggctgc 1440 tgctgctggg gtcccagatg cggacggtgc catcagcaga acaggaggcc aggcgctggg 1500 aggtgggact gaaggccagg ccccacacgg cgtccccgtg gccctccagg acgtggctca 1560 gcacgcttgg gtcgtagcca tcatagggat ccatgctgag gtctggaatc ttccaactat 1620 ggatgcaggc atctgccccg ccactgtagc agtattcact gttgctgccc atagccacag 1680 ccaacactgg gcccctgtga gcccggaaag catgtatagg ttccacatct agcgccgcat 1740 tettettgge egtgacegee ttetgeaggt tecagagett gagegtgeeg teeteggagg 1800 eggtgagcag agcegaetgg etgtggtgga aggecaggga aegaatgeeg tegtagtgeg 1860 agegeagggt gaaettgggg ttecaegtet tettaaaage atetttgetg teagaeagat 1920 egeagetgag gtegttgteg ttggtgaegg tgagatetge caagteeeec aggeteaeet 1980 eccegecee gatagtgtee atgatgaaga egtetteatg tggeegggge tggggtgtge 2040 caggaggegg gecagteact tttgggggea geceateeae ateeegeagg teageeagaa 2100

```
tgccttggag tttgacccga cggctttcca gctcatgggg gctcccatcc acagtgcacc
                                                                     2160
geogagggte tggagecect tecceatect etectgagee caggaaatea aacteattga
                                                                     2220
tagcatecte agagtegtet tecteateat egtetteeat ttegggeace agageettgg
                                                                     2280
atgggagett cacacgetge ttettgtget geacgetgte cagetcateg teetegtege
                                                                     2340
tgtcttcgtc ctcgcagttc tgcaggaagg ggatctgccc cagcactgag ccgcccaagc
                                                                     2400
getetttgee atetttgeet geegegttee tetttatetg etectegate tgttteacea
                                                                     2460
geagegacte eccaecactg agecetgeag ggeetggtgg agecetgggg geeeetteae
                                                                     2520
teggetecae tgeceegttg agetecageg ageggeecag cagggaacgg aegegettgg
                                                                     2580
accgcatgtc gaggatggtg tctg
                                                                     2604
```

```
<210> 5313
<211> 2806
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2792)...(439)
<223> similar to gill50625 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5313
ttttttcagg tgctcaaact tttattttct tacaaaatgt tatagaaatg aacccaaact
                                                                       60
aaacagatat gtacatgtat atatgtacaa aattttactt ctgaaaaaga acctataaaa
                                                                      120
atagatogta ttaaaaaaac ttaaaaagat ttaaaaccaa tactatgaaa ttgattttct
                                                                      180
taaagtaata gtaatcttaa attgcaggtt gtagttggtt ttccaqqctt atttatatqt
                                                                      240
ttgattgtgg ttggatatat aaaggagttt ettteattte agaatgeete caqteteatt
                                                                      300
ttattatate aaagagteea gaattttttt teeetteaca aateetteaa eateaggaea
                                                                      360
aggcatgtta agttacaaat cacctttggt catcatcttc ttcttgagtc acaggtctga
                                                                      420
aaggcaatgt agtttgteet ettteaggat eagacatteg gagaattett ateagtttae
                                                                      480
tggatggaag tgaactcatg ctttgaggtg tgagcaagat aaactgtcta aaacgctggg
                                                                      540
aatctgccat cttcagtatc aagtccatgg caattctcct attaaccata tccatgtaga
                                                                      600
catcaaattc atccaggcat ctgaaaggag attctgcgat ggaccacagg gaaagaataa
                                                                      660
aacacactgt ggagaaagaa cgttcacctc cagacaaggc tctcatgtca ttgaaagcag
                                                                      720
etttatttee tteteeagge tgaactgata tacttagagt tteattettg tggteaaaat
                                                                      780
tcatttttcc acaataggcc cgctgagata gtaagttgtc aaagtataat ttgcatcgta
                                                                      840
aagtcaaaca cettetaaat tgttgatatg tettgaatet gtgeteeatg attteteeea
                                                                      900
gtaatttaat aaactttttt aaagtcctca ctttactatc cagatcaaga taggtctctc
                                                                      960
ttgcttcttg gtactgcctc attatttcct ctcgatctcc atgactagca tgttctgcct
                                                                     1020
gtatettetg cettaatega ttaatttett tgteeagaat tgatgeagat ttttetaett
                                                                     1080
ctatacgete tgggcagatt tgtettgett gtgacatttt etectetagt tetttetett
                                                                     1140
tcatatccag ttctcgtttc tttttattta aggtatccaa gtgttctttt tgttttctt
                                                                     1200
cataatgtcg tttccctcgt ttttggttat ccacttcaga atcagcaagg tttaattcat
                                                                     1260
ccttaagtgg gtctgctagc tccgatagtt gattaatttt gaatttaatt gcatcatact
                                                                     1320
tattttctgc ttctattttc agacttttaa gatgctccat attttctttt tgttqctcca
                                                                     1380
tatgtteete aaceatttte attttgettt tatttteetg agetteatet tecaaagttg
                                                                     1440
caatatctac agactggtgt tcttctatgt tctcaagttc ccgaatttca gaaatatttt
                                                                     1500
ttcttatttt catctttagt tctttataat gtagttggca ccttttaaga agttcctcat
                                                                     1560
tgtgtttaat atctttttca agggcagata aatgttgctg aagatttaat atctgggccg
                                                                     1620
tcttattttc aacctcattc tccaagtcac ttatttcaga atccacatct ctgcttagga
                                                                     1680
```

```
acttaqqtct tgtattttca gatgaataat aacgtcctgc aaaaacttga tcaccatcag
                                                                     1740
                                                                     1800
caqtaaaaqc ttctctacaa tttttgggtg gcttttggga ctgcattact gcacgagcta
cagaattatt tttgattagt agcactgtct ctatgcctct catgtcaatt aggctatttg
                                                                     1860
ccgcaaccgc attatctatt tctaaagctg tcagaactgt tggaaagtct ggatgataag
                                                                     1920
capetetqtq tettacatea tatateteat teegacaete agaaactatt ateggtggee
                                                                     1980
gtgaggtcca tggtaaataa aaccttttca tgagtgcctg aaggaccctt tcatcagcat
                                                                     2040
gattatggca acaataggcc tgcagaagcc cttttaagca agattcaata gccaaagcaa
                                                                     2100
                                                                     2160
qttctqqqtc ccqaaqatqa atqcaagctc ctaaagggcc tacaggttta taggtaaaat
gtccttgtct ataagcatca tctatggctt caagaagagc tggaacatta gggccaaatc
                                                                     2220 -
ttttgagtcg atcagtttta ctatctttca attctttcag ttgcccctga ttgtagctca
                                                                     2280
                                                                     2340
qtqcatgctt cacatctaat tettetetet taattttgee atgttettet ttgteetttt
ctatggcttg ctgaaactgt tcgatctctt gattgactga attttcttga ttttgaaagg
                                                                     2400
cctttactct ctcttttaac caagatattt ttttttgtct ttccaaccgt tcaggttcca
                                                                     2460
                                                                     2520
aagattggtc agtacttttt ttcagctctt caattcgttt acaaagctgc tcatcatctt
tctttaatgc tttatattcg tttaaggatc ggttatataa aacctcagct tcattatagg
                                                                     2580
cccttttctt agcaacaaca tctgctttca atgccataca ttctggtgct cgtgcatttg
                                                                     2640
totottoact aatottttot agtttgtott gaatatoott gtacttttgt totgootcat
                                                                     2700
taagtetgae etgetgttet tecattttee tgteaagtet ageageaega tetteteeaa
                                                                     2760
ttttgatatt atctctgatg gcattcaatt gtttttcaat ttcatt
                                                                     2806
```

```
<210> 5314
<211> 1725
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1726)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (5)...(224)
<223> similar to gi5107000 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5314
gactteeegg ttegaggget geetggeetg egeeaeggee taetteatet teetetgeat
                                                                       60
ggagacccac tatgagaagg ttctcaagaa gatttcccgc tacatccagg agcagaatga
                                                                      120
gaagatettt geacetegag geeteetaet tacagaceet gtggagegtg ggatgagggt
                                                                      180
tattgagate tecatetaeg aggaceggtg cageagtgge agetecagea geggeageag
                                                                      240
cageggeagt ggcageagea geggtggggg tggtggggeg ggggeeeggt gaetggeega
                                                                      300
gagteeetgt agggaggtgt atggeeggag tgagggeett geagaeetge ggeggetgeg
                                                                      360
ctaccagage accegettet gagteattet ttgggeteae cetgetgeee ggggtgggag
                                                                      420
ggagggtgac gggcctcata tttcctgtgg gccatcaacc tatgccccct gtccctcacc
                                                                      480
cccgtctgga tcagtccatt tcctgacctg ggggcttttc cttcccgatg gggctggtct
                                                                      540
gggccacaca gagacagatc ttcctaggaa ggctggggtg gggagaacac aacctaggcg
                                                                      600
gcccctctct tccacagccc ctctcccaac cctgcgaggg gggccgaggc ctaccacata
                                                                      660
gaggactece acactgeatg accepteate ceaaacecat atceaceagg actetttece
                                                                      720
ttgggccctg cgtcccgtgg ctgtctccca gtatctgttc cttctcatgc ccctgcaggg
                                                                      780
```

```
ccccggcctg tctatgatcc tgcctccacc aaattcaagg tgtggggaga cgggtgccgt
                                                                      840
ggttgggagc tgttcagcgc actcctgacc tcttctagac ctatggcttt cctgtcctgc
                                                                      900
attcagaget agaggecage teggeetige gagaageate caactttgag aetttgeagg
                                                                      960
ctgccaggtg ctggttgggg ggcacagagc ctggggctct gggaggtaat atgggggtct
                                                                     1020
gggaaactcc gtgaagagac atagccatgc ggggcctgaa tctcctgaac tacagccagt
                                                                     1080
ttcctgagat tagaacctgt gtgtatgcac atgtgaatgt atgtgtgagt gcacatgtgt
                                                                     1140
gtaagtgcag tgtgcgtaaa tgtgtgagtc tgcgtgtgtt agcatgcctg tatgtgagcg
                                                                     1200
cgtgtgtgag cgcatgtgtg tgcaccagtg cacaagtgta tgaatgtgga cacatttata
                                                                     1260
agcacacctg tgtgtgtctg agtacatgtg cacacacgtg tgcacaaatg tgcatttata
                                                                     1320
tgagtgtgag tgcatgcatg tgcatgaaca tgtgtgcaca agcatgtgtg tatgagtgtt
                                                                     1380
catgtgtatg agtgtgtgtg tatgcaggtg agtgcatgtg tgtgtgagtg tgtttgtgtg
                                                                     1440
tteccettgg etgecaggee aacgaetget tetetgeate etgetgtett egetacetga
                                                                     1500
gggtctgtga cttcttccct gtgtgggtcc agcctgaccc cctgtaagta aatgtccaaa
                                                                     1560
agccccttgc ccctccccta ggggctaccc agggaacata ctcttactgg cattatgttt
                                                                     1620
ttagttggga ggaggaaggc enggggtttt taggggaaag gaaggagnec aaacttttgg
                                                                     1680
ttgggccttt tggtggcccc ctnttcaggt tccccatgaa caagg
                                                                     1725
```

```
<210> 5315
<211> 2185
<212> DNA
<213> Homo sapiens
```

<220>

<221> misc_feature <222> (1) . . . (2075)

<223> similar to gi2822143 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5315
atgtgtaget caattetgaa ggacattetg cacetggetg agcacgatgg aacacaceet
                                                                       60
gagcaagggc tgtacacatg tgcagcagag catgacctgc accaaaagga gcagattaga
                                                                       120
gagaagetea eeagaagtga tgagtggagg cetteatttg tgaaceacag tgeteaegtg
                                                                       180
ggagagaga acttcacatg cacgcagggt ggcaaggatt ttactgccag ctcagacctt
                                                                      240
etccagcaac aggtettaaa cagtgggtgg aagetgtaca gggataccca ggatggggaa
                                                                      300
gcctttcaag gtgaacagaa tgatttcaac tccagccaag gtgggaaaga cttttgccac
                                                                      360
caacatgggc tgtttgagca ccaaaaaacc cataatgggg agaggcctta tgagttcagt
                                                                      420
gaatgtgggg aattgtttag gtacaactcc aaccttatta aatatcagca aaatcatgct
                                                                      480
ggagaaaggc cttatgaggg cactgaatat ggaaagacct ttattagaaa gtccaaccta
                                                                      540
gttcagcacc agaaaattca cagtgaaggc tttctttcaa aaaggtctga ccccattgaa
                                                                      600
catcaggaga ttctcagtag accaacacct tatgaatgca cccagtgtgg gaaggccttt
                                                                      660
cttacacagg ctcatctggt tggtcaccag aaaacccata ctggagaaca gccctatgaa
                                                                      720
tgcaacaagt gtgggaagtt ttttatgtat aactccaaac tcatcagaca tcagaaagtt
                                                                      780
cacactgggg agaggcgtta cgagtgcagt gaatgtggga aattgtttat ggacagcttc
                                                                      840
acacteggta gacateagag agtteatact ggagaaagge ettttgaatg cageatatgt
                                                                      900
ggaaaattet ttagteaceg etceacacte aatatgeace agagagttea tgetggeaaa
                                                                      960
aggetttata agtgtagega atgtgggaaa geetttagee teaaacataa tgttgtteag
                                                                     1020
catctgaaaa ttcatactgg agaacggcct tatgagtgca ctgaatgtga gaaggccttt
                                                                     1080
gttagaaagt cccacctagt tcagcaccag aaaatccaca ctgatgcatt ttcaaaaagg
                                                                     1140
tetgacetea tteaacacaa gaggattgae attaggecaa ggeettatae atgeagtgaa
                                                                     1200
tgtgggaagg ccttccttac acaggetcat ctggttggtc accagaaaat ccatactgga
                                                                     1260
```

```
gaacggcctt atgaatgcac tcaatgtgcg aaggcctttg ttagaaagtc ccacctagtt
                                                                     1320
cagcatgaga aaatccacac tgatgcattt tcaaaaaaggt ctgacctcat tcaacacaag
                                                                     1380
aggattgacc tcaggccaag gccttatgtg tgtagtgaat gtgggaaggc cttccttaca
                                                                     1440
caggeteate tagatggtea ecagaaaate cagaetggag aacggegtta tgaatgeaat
                                                                     1500
gaatgtggga aattetttt ggacagetae aaacttgtta tteateagag aatteacaet
                                                                     1560
ggagaaaagc cttataaatg cagcaaatgt gggaaattct ttagatatcg ctgtacactg
                                                                     1620
agtagacatc agaaagttca cactggagaa agaccttatg agtgtagtga atgtgggaaa
                                                                     1680
ttttttagag atagctacaa actcattatt catcagagag ttcatactgg agaaaagcct
                                                                     1740
tatgaatgca gcaactgtgg gaagtttctt agataccgct ctacattcat taaacatcat
                                                                     1800
aaagtttgca ctggggagaa gcctcatgag tgcagtaaat gtagggaatt gtttaggact
                                                                     1860
aaatcgagcc ttattataca tcagcagtct cacactggag aaagtccttt taagttaagg
                                                                     1920
gaatgtggga aagacttcaa caaatgtaat actggtcagc gccaaaaaac tcacactgga
                                                                     1980
gaaaggtett atgagtgtgg tgaatecage aaagtgttta aatacaacte cageeteatt
                                                                     2040
aaacatcaga taattcatac tggaaaaaagg ccttagtgga gtgaatgcag gaaagtcacc
                                                                     2100
aaaactgtca cctcattcag caccaaaagg ttcacatcgg accaagaacc tattaatata
                                                                     2160
tgtaaatcta atgttgaaag agttc
                                                                     2185
```

```
<210> 5316
<211> 1446
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1222)...(265)
<223> similar to gi709961 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5316
tttttttttt ttcgtacaaa cataaatata tttaaatttt ttaactgtaa gtaaattcaa
                                                                       60
acaaactgtt ataaaacaga atacacagtt gtctgcatag atcataaaaa acataaaaac
                                                                      120
cagaatgetg ggtaggtget ggtggtgaaa actgcaggge taaaacttge tcaacaatga
                                                                      180
actagggacc actatggett aatgaacatg geceaeceet eetaetaatg gttttgteaa
                                                                      240
cttttggacc ctagaaattc agaattttct ccttcttcct ctgccagctt tggtccgtgt
                                                                      300
ccgactacct ggctggacag taacttgctt tttaaagtcc actaagcaat ctgtggcttc
                                                                      360
tgaaatggaa acaaaagact tgacgggaga ttcatttaag tcacgacgtg tgaaagaact
                                                                      420
etgeatetet etgetgeage etgeetette eatecetggt gaaggeacee tgaaggetee
                                                                      480
tgtttctgaa gacttgatgt ctgcatctga agtcttgtgc tcagactgtt ccaagaaact
                                                                      540
aaggagtegg cetteactgt ggeettttte etttgggtte tteageetet getgeeactt
                                                                      600
cccctccaca gttgaacatg ctcttccact cccttcaggt ccatctcctt ggtcagcctt
                                                                      660
tgcaagctgg agacaggagt ccacatgaca ctgatactct ctaaatggga ccagggattt
                                                                      720
acagaggtaa cactteteat tettgteaat gtetagagaa gtetgggeag etgteecaet
                                                                      780
gtcactcttg gtcttggcct ctttttgtct ccgagtcaat actgtatctt cctccatcag
                                                                      840
accattgcag tacatggcat gtcgttcaat ctttgtgggt ggaaagcatt ggtcacatag
                                                                      900
cgggcaggat acctggttac tggatgagaa ggtagaaata gctacttcct tctcagcatc
                                                                      960
ttccttgtta ccaacctcct tatctgccat tattattctg actccatcca agatatctct
                                                                     1020
gctacctgga gagacttctc tttcaaggtc aaaagtttca gaggaactta gctgtgtctc
                                                                     1080
aggacaaaca gtgatttett etgeagaact etetggeata aggaetaage ttetettaet
                                                                     1140
ggtcaaagca gcaacacttt gtgaagcagg tacagagttt ccctcttcag aagtttcttc
                                                                     1200
aacaatccct tgggaagact gcaaagaaat acgtagtatc ttaaatatac aggcacaggt
                                                                     1260
```

```
gaactggctt ctcttccttt tttaaaaaaa tttaattgtt caatgttctc cctcaacaat 1320 taacaataag aagaaaatat tttccataag ccagtaagtg tcaataaaac aagcacatcc 1380 tgtaaagtca gaagactggt atttaaatca gaactaaatc ctcgtgccaa gcttggcgtg 1440 atcagt
```

```
<210> 5317
<211> 2681
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (475)...(1170)
<223> similar to gi1769491 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5317
ctctgtggaa tccggcgtaa tgtttctgca cgcctacccg ctcattcagg aagccagcct
                                                                       60
egecattagg gagtetttte teaccetgae caagttttee caetggette tteattgtat
                                                                      120
ggcattcaga ttgcagatca tcagttgaga caagccacca agattgcttc agcacctgaa
                                                                      180
aaacteggge gagateeaeg geeacagaee teeaggataa geeaggagea ggteeetgag
                                                                      240
gcctcacage teteccaget gaetteaaat etggeecagg tgaateggae aaatatgaet
                                                                      300
ccctcagacc ccctgcagac ctcgctgtct ccagaacttg tttccactcc tgttcctccc
                                                                      360
cetecteeg gggaggagac caatetggaa geatetteet eegatgagea geetgegtee
                                                                      420
ctcacaatag cccacgtcaa gccaagcatc atgaagagga atgggagctt tccaaagtac
                                                                      480
tatgcctgcc acctgtgtgg acggcgcttc,actctccgga gcagcttacg tgaacacctc
                                                                      540
cagatecaea caggagtaee ttteacatet agecaacagg gagaaagteg egteeeeetg
                                                                      600
actototgta gcaatgcago tgacotoggg aaagatgcca tggaagtgco tgaagcoggg
                                                                      660
atgataagtg acagtgaget geageacate tetgattete ceateatega tqqqeaqeaq
                                                                      720
cagteggaaa ecceaecece etcagacatt getgacattg acaacetgga geaggeegae
                                                                      780
caggagaggg aggtgaagag gcggaagtac gagtgcacaa tatgtggacg caaatttatc
                                                                      840
cagaaaagcc actggaggga acacatgtac atacacaccg ggaagccttt caagtgcagc
                                                                      900
acttgtgaca aaagettttg cagggccaac caggetgeec gecaegtgtg cetcaaccag
                                                                      960
agcatcgaca cttacaccat ggtggacaaa cagactctgg aactctgcac atttgaagaa
                                                                     1020
gggagtcaga tggacaacat gctggtgcaa acaaacaaac cctacaaatg caacttgtgt
                                                                     1080
gacaaaacat tetecaetee caatgaggtt gttaaacatt catgecaaaa ccagaacteg
                                                                     1140
gatgtttttg ccctagacga agggcgatcc attctcctgg gcagtgggga ctcggaagta
                                                                     1200
acggagectg accacccagt gttagettee atcaaaaagg aacaagaaac egtettaeta
                                                                     1260
gactgaatgt cacttatett tttaaaaaae teteattttt acaaagaeta tetteeetee
                                                                     1320
cttccctgaa ttcagaactg tagttctcca tggcatgata caaacaggtc cttgttctct
                                                                     1380
tetectette ceettiteea cateceagee ceacetetgt aaaggetttg tgeattataa
                                                                     1440
acctggaatg tatcgacttt ctttcagggg atattggaaa gataatggtc attatactta
                                                                     1500
taaactcaaa ttttgagagg ttttagatta ttcagaagca tacttggaac taatgaaggg
                                                                     1560
tatataataa aacaactgga atccaatttg gtaagctaaa attatgactt tccctgggta
                                                                     1620
aaaagtette teagaaaaac aatgteagaa aataacageg tgetgettag aaataegget
                                                                     1680
gggctctgta ctatgcaaaa tctagaaagt gtggggaaac tttaaaccca agaaaacgtt
                                                                     1740
cttagtattc atcctccagg tgtcttactt cagaatgcat cctttgagat tatgtccact
                                                                     1800
taagagaaat catcagttaa gaaatctact ttaacaaaac aaaaaggaga aaaagtaata
                                                                     1860
atgtgatggc aatcttaatt tttgggtaca acatgacaag ctgtgagttt gtgtgtttgt
                                                                     1920
aagagaaaaa tgtgtgggta cttgctaata aacaggtgaa ttaatgcaca tccttatctc
                                                                     1980
```

```
attgctggct tctttccaag ttgagcaaca acaaaatgct gtatttgagt ttctgacaaa
tttgttttaa aaatcaaatt tgaatgtact attctataaa ttgcctttct gaatagaaca
                                                                     2100
tgacatgeca ttttctagca getgecagtg ataatttgtt ttacactaac ttttaaatca
                                                                     2160
gtgtgtgtac tgcagggaaa aggatatagg aatactcatc ttacagggga atttgtgacc
                                                                     2220
agaagatgta gtaacttcaa tgactgaaag tcaatgctga tagtttactg gcaacattaa
                                                                     2280
ttgaagcatc aaaaataaat ggcaaagaga aatcaggaca aaaaatctaa ttgctgtttg
                                                                     2340
ggaaaaaact tgattttgat gtttattctc caggtttttg gttgtttttt tttctttctt
                                                                     2400
ctitcttaat gcctgaaatt ttctccattg gcccgaaagc agtaaaaatt gttcattaat
                                                                     2460
cttccgttag gccaataaaa gaagggcctc acaagacaaa acaggagcca gaagtaagga
                                                                     2520
ctgaaggaga aggggagaat agctaatagc tatagtatat gtatatgtta aaaactgaat
                                                                     2580
atcccatcat cctatttcat gtatagttga gttctcaaat ttgtaagttt ttatacatcc
                                                                     2640
tttcattgaa taaacgttta attaaatgac taaaaaaaaa a
                                                                     2681
```

```
<210> 5318
<211> 1044
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (973)...(379)
<223> similar to gi2760121 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5318
ttttttcaat attacaacaa tctttattgg aaaaccccaa gtattttgtc ttgaaaaatc
                                                                       60
agcaatccag gtattaaaaa tagcatggaa tgcccaattt tactttgata attacatggt
                                                                      120
agtcagtttc cgctcctggc taaagccttg gattttcttc tgggcagttc ctaaaqqcac
                                                                      180
aggtggcatg gaagaaatca ttccattttc gtctcctccc cttatttqat tqqqqtqtct
                                                                      240
ggttaccaaa aagagtcatc aggcccttgg attaccttct tgaactgatc ttctagatcg
                                                                      300
caagtcaaga ctgccatcat gttcccccaa atgcaaaaag ccttgttgct ccacctctct
                                                                      360
cetttecaga acaagtgage tggggtttge tttettete atateetgea gettgateaa
                                                                      420
tttttctatc aggaacattt tatctttgcc ctcattaatg atctgctcat ggagcagect
                                                                      480
tatcataatc ttccttccct ctgtgatctg ccagtaaaga taggtgatga ttagcacaat
                                                                      540
gagggtgagg atgaaaaaga agtgcacact tccaatgagg ttccgataga tccaaacaac
                                                                      600
ccacaggtag ccaggccgtg tacttagggt gtcgatccag ctgtagatgg agtgaatgaa
                                                                      660
gagaggcaga cctcgaaaag ggccacagtc agctgaaggc ttcaatctcc agatggtgat
                                                                      720
ggccagggtg cacaagaccc cggtgaagga tgggaaaaag agcaagaaga tgaagaaagt
                                                                      780
catcatctgt gaggcccgcc aggctttgct cggaggctgg aaattcatca tcaggctgat
                                                                      840
atttttggag tagaccatga tgaaaagcat aatcatttgg ataaagggca gcagggggca
                                                                      900
aaagaatatg ccaatccacc ccagagtttg tgcatagatc agttgtagaa cgttcctggc
                                                                      960
aatgtcaaac teetgaagge caagaettgt gatcagttge atcccaatga ttataatcag
                                                                     1020
caaaagcgtc gggccacgcg tccg
                                                                     1044
```

<210> 5319 <211> 1480

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(542)
<223> similar to gi303694 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5319
cagagaagca agttcgagaa cgaggagttt tttaggaagc tgagccgcga gtgtgagatt
                                                                      60
aagtacacgg getteaggga eeggeeecae gaggaaegee aggeaegett eeagaaegee
                                                                      120
tgccgcgacg gccgctcgga aatcgctttt gtggccacag gaaccaatct gtctctccag
                                                                      180
ttttttccgg ccagctggca gggagaacag cgacaaacac ctagccgaga gtatgtcgac
                                                                      240
ttagaaagag aagcaggcaa ggtatatttg aaggctccca tgattctgaa tggagtctgt
                                                                      300
gttatetgga aaggetggat tgateteeaa agaetggatg gtatgggetg tetggagttt
                                                                      360
gatgaggage gageecagea ggaggatgea ttageacaae aggeetttga agageetegg
                                                                      420
agaaggacac gcgaatttga agatagagac aggtctcatc gggaggaaat ggaggcaaga
                                                                      480
agacaacaag accetagtee tggttecaat ttaggtggtg gtgatgacet caaacttegt
                                                                      540
taattaatag cacagcagat gtgtgctgcc catctttaca tacacattgc ttctagttgg
                                                                      600
cagaaataat tgattaaaag accagaaact gtgataactg gaggtactac ggtctatttc
                                                                      660
tcaaccttag gcagtaatag acatcacaaa ctgccatggt tttgcactat gattataata
                                                                      720
cotgoattte taatttttta ageatgtage cagtaataat ttgaagtttt ttttetatge
                                                                      780
aagettaeet tgttggeatt attttaggga gttgaaacta teaactgtaa ageteetttt
                                                                      840
cttccacttt aatttaaaag ttcatgtcat ttaaaaacaa gtcaagaaat taaaattgta
                                                                      900
tcagagggtt ttctctaatc attttttcta ttttttttt tgtacttcta aatgtttggg
                                                                     960
ttatacaget teattttaga tgaceattet tattttttgg tttgtttgee eeattteett
                                                                     1020
ttgtgttttt atagtctata gcattttaaa actgctgatg ttgtttgcat tatttacagg
                                                                    1080
ctaaaaactt agtagcatag agctgtctgc cacagccttc tgacaaagtt tacagttatt
                                                                     1140
aaagttgcag tatcctttta aatgctagta atcagcactc tttctttttt ttttttaaa
                                                                     1200
aaaaaacggg gcctccaagg gtgccccggg ggggcccaaa ccccggggaa aaaaggaacc
                                                                     1260
ccccgcctta acccccaaa ggaccgggaa taacggcctt ttttttttaa aaaaaaaagg
                                                                     1320
ttaaaagggg gataaacccc ggcccccgcc ccaaaagggt taaacctcqq qtccqqaaac
                                                                     1380
aaggagtggg gggggaaaaa tcccccaaaa agaacctcta ccggaaggcc caaaaaaagc
                                                                    1440
cccgggcggc ttttggttta atccggggtt tttttaaaaa
                                                                     1480
```

```
<210> 5320
<211> 956
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (937)...(614)
<223> similar to gil710282 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5320
                                                                       60
ttttttttt ttgagaaaca agcatttgtg tttattaacc aaggagaggg aagtcaaagc
aatgcagact cctaaccagt ccctcctata gtctgcccac ctaggccagc tgccaaggac
                                                                      120
taggaagagc agtggatagg cccctcccca ctgccccgac cccagggtga gttctgctgg
                                                                      180
                                                                      240
gtaaggaaga ggaagtcagc aaaggacaga ggccaaggaa agaaggagga aacagagccg
                                                                      300
ctggggagac aggattgagg agatcccttg gcccctcact cacagtgggg agggcaaagc
                                                                      360
accgcaaatg cagccccaca agaggaacta agcaggagta cactcatgtc aaaaaccttg
                                                                      420
tattggggga ggggaggagg gggttctcag gtgtccaaag ccaagaacaa aacccttgga
                                                                      480
gagtcagtcc ttgcccaaga atgctggtcc agcctctaag cctttgcctc cataccaagt
tcacaacagg gtggagcctc tgacacggcc gtctagagaa tggatgcaag agaggtccag
                                                                      540
ggaccacttg cctctgtaag atccgtcctg tggcgaattc caggcccagt ggcgcctagc
                                                                      600
etteagetge tgggetetee egageetgee ttageecata caaccaettg atcaegeggg
                                                                      660
cattgcgctc caccaccgac acgccatagg gaacgcgctc ccgggcccgc tcctcaacag
                                                                      720
teacegaget geggegggag cageeeett cagagetgee eggeeeagea etgggeeetg
                                                                      780
ccagggacac gatatccgag ctggcccgtg ccaggtgggc cacacccaac cctctcgcct
                                                                      840
                                                                      900
cctccgggtc caggccgcag aagttaaaaa agcgctcgag atcagcggct gccctagaaa
                                                                      956
agegeteget caagteegae ttggagegtt ggaatteeae cacaetggaa tggtga
```

```
<210> 5321
<211> 777
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (778)
<223> n = a,t,c or g

<220>
<221> misc_feature
<223> n = a,t,c or g
```

```
<400> 5321
gtgtggtgca attccctata gtgagcggga tgagctgacc gaggatgggg aaggcagcat
                                                                       60
ccgcagctct gaggagggc ctggtgacag tgcatctcca gtattcacag ccccagcaga
                                                                      120
gagtgaaggg ccaggaccag aggagaagag tcctggacag cagctcccca aagccaccct
                                                                      180
geggaaggat gtggggeeea tgtaeteeta egttgeaete tacaagttte tgeeeeagga
                                                                      240
gaacaatgat ctggctctgc agcctggaga tcggatcatg ctggtggatg actctaacga
                                                                      300
ggactggtgg aagggcaaga tcggcgaccg ggttggcttc ttcccagcta attttgtgca
                                                                      360
acgggtgagg ccaggcgaga atgtttggcg ctgctgccaa cccttctccg ggaacaagga
                                                                      420
acagggttac atgageetea aggagaacea gatetgegtg ggegtgggea gaageaagga
                                                                      480
tgctgacggc ttcatccgcg tcagcagtgg caagaagcgg ggcctggtgc cagtcgacgc
                                                                      540
cctgactgag atctgagagg agccaaggga acccagatga cacccttgcc catgcctgga
                                                                      600
cettgettet ggecagggag gggateagge cecettgtee actecatace ettecteeet
                                                                      660
etgteeetet eetaggtgee aettaeegtg gettaggage ettttgtaet ggggaagatt
                                                                      720
ttatttettg ggtggggtge cetgagtggg ttgateetet gggaettgge ggngatg
                                                                      777
```

```
<210> 5322
<211> 1980
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1778)...(935)
<223> similar to gi3043548 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5322
tttttttttt tgagacagag ttttgctctt gttgcccagg ctggagtgca atggcgctat
                                                                       60
ctcacctcac tgcaacctct gcctcccggg ttcaagcaat tctcctgcct cggcctccca
                                                                      120
agtagctggg attacaggca tgcaccacca tgcccagcta attttgtatt cttagtagag
                                                                      180
acagggtttc tccatattgg tcaggcttgg tctcaaactc ccgatctcag gtgatctgcc
                                                                      240
egecteagee teccaaagtg etgggattac aggeaagage cacegegeee ageaeggtet
                                                                      300
tttcaaagac cagataattt atttaaccaa ctgtctaaag atggacattg tgattgatca
                                                                      360
cactatttta tatgtaacat tgaatggagt gggtgagtcc taggaaacat tctctcctaa
                                                                      420
aagtttacat ttttcattga ctagaagtga ccaaaataga ttctactgat gagaaaagac
                                                                      480
ttttgaaagc agtatggtca ggttggcagg tgaatggcct caagagctta ggatttcatt
                                                                      540
gctactaaaa gaacaagact attcagttgt gaaacaatga tttagtcaaa tactgatgct
                                                                      600
gtctcagatg agtaactgca aatcacttca aaaggtagaa gggtagctta aatgtgaaaa
                                                                      660
aggttactgc cacticatgt agggaagata acaagcattt gcaaatagca aaatagaaag
                                                                      720
aaataaatgg tttcagtaca agctcttata ttcacttggc atcaaaatag tccaaaataa
                                                                      780
atctgagaac cacggcaagt tatagctgtg ttaatgacaa aatgtgatat ttactgttta
                                                                      840
aatttagcag ctgggagaat ccccttataa ggaagacaga aaatacattt atatccagac
                                                                      900
tgcattactc tttggaaaaa'tatgaccaat cagattttgg gtattattgt tacaaccttt
                                                                      960
tectteacet etgeateatg gtgateaact aaagetetta ttttetggge acattettet
                                                                     1020
ccatgtaaca ggaaaaacaa tgaaccttca gtgaaagtag gctgcacagc taaatggcct
                                                                     1080
totattttga ggcagttott tatattotga aatagogtaa gtactogaag aagaatotoo
                                                                     1140
tttgctacgt ggctgtcata aagggaaagg aatgatgaat ccacttgggc acggagaagt
                                                                     1200
cettetgtea tggetggatt tteagacaaa tteaaaagea gttteaaaac ttgeacette
                                                                     1260
gtgtttccat ttccagtaag taacacctgg aacaggtctg taatgtaact gtgaagcatg
                                                                     1320
tgctggtggt cattggtaac agtcatgttt gtcaacaatg tcagtccagc cagctgcaca
                                                                     1380
gcagagttca gaggaccaga gaagacatcc tcacatactt gactgatgta tatctttatc
                                                                     1440
ttgatttgat tttcaacatt cacactcagg ttatttagtg catttaaagc tttctcttta
                                                                     1500
atactetggt tggaatggtt gattttgttt geaacaattg gaataccace caattcacga
                                                                     1560
ataatagett ggttaactga aaaggetgea ttgttaeeea aagtaateaa agetetttea
                                                                    1620
ataattacag gatcctccgt tgactccagc aggtaaagga gtttctgaag ttgttcagca
                                                                     1680
tttagaacat catcatatga accatcagtt aagtettetg eggaettega agagegtate
                                                                     1740
eegagetege ggtegeeeeg eegeegaeee egggteagee tgtaaatgea gtageaggeg
                                                                     1800
ecegegeega geageaggee egeegeeace cageeegege ecegggggee acceatgetg
                                                                     1860
eegeegegge agageegeag egeegggeea gggeaggagg etegeggggg ceagegegga
                                                                     1920
ggtctccagc gcacgcgggc ctagccgcca cagcaaacgc cacctgacct ggctcgtgcc
```

```
<211> 620
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (289)...(600)
<223> similar to gi2995577 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5323
tetegetgee teacttgage aageatgage eeggagetet eeatgaaegg eeaggetget
                                                                       60
ggctatgagc tetgeggtgt getgageegg cettegtega ageagaacae geeceagtae
                                                                      120
etggeeteae eeetggaeea ggaggtggtg ceetgtaeee etageeaegt eggeeggeeg
                                                                      180
cgcctggaga agctgtctgg cctagccgca cccgactaca ctaggctgtc cccggccaag
                                                                      240
attgtgetga ggeggeacet gagecaggae cacaeggtge eeggeaggee ggetgeeagt
                                                                      300
gagetgeatt egagagetga geacaceaag gagaaeggee ttecetacea gageeceage
                                                                      360
gtgcctggca gcatgaagct gagccctcag gacccgcggc ccctgtcccc tggggccttg
                                                                      420
cagcttgctg gagagaagag cagtgagaag ggcctgagag agcgcgccta cggcagcagc
                                                                      480
ggggagetea teaceageet geceateage atceegetea geacegtgea geceaacaag
                                                                      540
ctcccggtca gcattcccct ggccagcgtg gtgcttgcca gccqcgccqa qaqqqcqaqq
                                                                      600
agcacccca gtcccgtgct
                                                                      620
```

```
<210> 5324
<211> 1000
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(677)
<223> similar to gi2662587 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5324
attgccaaca tgtttctagg aattatcatt ttgaagaaaa gatacagtat attcaaatat
                                                                       60
acctccattg ccctggtgtc tgtggggata tttatttgca cttttatgtc agcaaagcag
                                                                      120
gtgacttccc agtccagctt gagtgagaat gatggattcc aggcatttgt gtggtggtta
                                                                      180
ctaggtattg gggcattgac ttttgctctt ctgatgtcag caaggatggg gatattccaa
                                                                      240
gagactetet acaaacgatt tgggaaacae tecaaggagg etttgtttta taateaegee
                                                                      300
ettecaette egggtttegt ettettgget tetgatattt atgaceatge agttetatte
                                                                      360
aataagtetg agttatatga aatteeegte ateggagtga eeetgeeeat eatgtggtte
                                                                      420
tacctcctca tgaacatcat cactcagtac gtgtgcatcc ggggtgtgtt tatcctcacc
                                                                      480
acagaatgeg ceteceteae egteaegete gtegtgaeee taegeaaatt tgtgageete
                                                                      540
atetttteea tettgtaett ceagaaceee tteaceetgt ggeactgget gggeacettg
                                                                      600
tttgtcttca ttgggacctt aatgtacaca gaggtgtgga acaacctagg gaccacaaaa
                                                                      660
agtgagcete agaaggacag caagaagaac tgaggeetgt etggagtacg tagaccagtg
                                                                      720
```

```
tegtegtgag ggtgggacee tgtgaaggte tgaceacegt ttegettttg ttaatgeega 780 getaceegea gtgetgagee ageegtgeaa aaggaaatet teaggagggg actteteacg 840 ttgeteagae tgacacatgt agactaaata gaaaceeete ageeetaaaa tagaaaaaaag 900 aacagttetg gactattgaa cageeeatte atttattet gttttgttta eegacatatt 960 cagtattatt ettgtttet gaattetgag tetettgaae 1000
```

```
<210> 5325
<211> 1663
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1645)...(750)
<223> similar to gi484102 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5325 tttaagaact aatcaaatct ctttaatgtt taagcctatt tgtatctgat attttgttac 60 ttgcagccaa aagcagccta gctgatacac aatcgtcccc ctgccccctg gtcaccctta 120 cageteagag atgaacteta gagaaatgea aageeecagt tgggageeag eeggagaete 180 teettggtet ttagettggg aaaataggae ttgtgggggt gggggeagea teagatggat 240 cacagactec aagcaaagge atgataggag tttatttaca gacaagacac agcaaccage 300 acceacteag getetgacea ggggaggtgg tagacaagae eecagatata tataaatata 360 catataggte ecageaceat cageaceaga aegtteecea gecaggteec tgecagaagg 420 accaagagtc aggcaggatt gaggacatag aaaggagagg gccccagtct ttgccaggta 480 teagtgatea cetgttatgg teeceatgte agaggaagaa aetateettg geettgaagt 540 gtggacactg aggagcatga ggacggagag accetetgga ggegeeeca tteetgtgte 600 cagectgtgc ceteaatgcc aaggccacag aagegaagtg ccageaggag cagettgggg 660 aatggagaca ctgcaggccc ctccaggacc atccaggagc caggcatgqa ggtggggtcc 720 taggccatgg ctgcccatca cacaggagcc tcccccagtt tgctggtggc acttgtgact 780 cgcttattct cccggaggtt tcggaggcgg gcgctgaggc tgctgatctc ttccacatag 840 gcctggggca cccaccctt ctcaccatct gccaggcgga ccccttccag ccagccgtca 900 ctggtccagg tcctcactga caggatgtca gtcttctcca aggtcagctc atctgggtgc 960 agtgccttgt atgtcctaac acactgaacc tgggggcaat cttccccctc actgatgacc 1020 teettgteet eetggggget ggaggggeac aaggetgaga teeategetg etteteaett 1080 teegteeggg ceegeageag gaactggtge tteatgtget geeegtggag gagetggagg 1140 aggaacacgt ggccggggat gccctgcagc ttcaggctca ggtcccgcac ctgcagctca 1200 gccatcttgg catggacgaa aacggcaaac ttccctagct ccttccgccg agagagcagc 1260 aagcagtcat tgaagaggtg gaggtagact gccttgctgg acagcttcag cttggcaggg 1320 ggtgctgcag gcagtggtgc cagctctacc aactctccat gccgaaccag ccagcgggcc 1380 tgagagatca gcgggaaaat cttgccctca aagtggatct tcttgctcag gtggatgagt 1440 tectetgtee tetteatgga etgtacaeta geattgeact eetgeaceag eteettgage 1500 gcattgaagg cettggtgge catgtetteg tetteagage cetgtgetgt eegetteagg 1560 atgtteteca ccaacatett gaggegggtg atcetetgga agggeaggat aaggaaggag 1620 gtaaggggca gacgctggca cgaattccac cgcactgtgc taa 1663

```
<210> 5326
<211> 3455
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3456)...(1981)
<223> similar to gi436222 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5326
ttttttttt ttgaagcact gttttaaaac aacttctcaa atttatttaa ctcatgtggt
                                                                       60
taacatggta ttgtataaaa agaaaaaaaa aacaccactc aatacttact aagccttgca
                                                                      120
gacageteag agttgaggea geatattggg catagagate ataggatttg tattateeet
                                                                      180
tgcaagatgg aactccaacc aacaccagaa ttttccaatt caaattcagt tttagtcgag
                                                                      240
accccagcat aatttttaga aaaaagattg gattgttgct tttcttttaa ttttccattc
                                                                      300
ctatttagac aaatgaccag aggcaatgac aaaagtaact gtttaaaagg gatttctctc
                                                                      360
cagaagtttt ttctaaaggt ttaagtccag gctttccatc cttctctcca tccttttca
                                                                      420
ttttaaaaag aagggttttg gaatatgtca acctttactc agcttgctat acaaagccac
                                                                      480
tgctttagtc ctagacataa tgccaggact catctcccaa acttctggtc ttaatcaaqt
                                                                      540
tcatgcttgg ttgctaaaga agctcatgtt aatcccaaag tcagcacaat cccaacctta
                                                                      600
aaaagcagac agctgattgc atcacttacg acatacacca tcttgaggca aaagaagcca
                                                                      660
gtcagacacc ccttgtttgc tacgtgtgag acacatcagc agttgagcct gaccccttcc
                                                                      720
gcagagetea etgtgcaaaa teaccageae accaetgcaa tecaetgage teaccgeetg
                                                                      780
tccagccata atggaagtca cttgaaggtt atcattgtaa tagatgattt tccataagta
                                                                      840
actaataaaa atgttttctt tgatgtttag acctactaac aattcagtct ctccctctcc
                                                                      900
atcctctctt agggagcctg tacttttaag caaataggga agctaaaaat acaaaggagc
                                                                      960
aacatecatt tataaataaa tgtgtgeett atetteetea etaaetteet ggaaaagtge
                                                                     1020
tgtttttgaa tattctgttt tcttaaggag aaattttttg taaatgtagc acactgtata
                                                                     1080
taggaaggga tttctctttt tagtctttat ctcattgtac gggtttcact ctctaggtat
                                                                     1140
tgagagtggg ggaggagggg atcaacaaac cgcaaagagc agcataaagc acaccccgta
                                                                     1200
tcagcagcac ggcagctcct ccaatategt caatgctgac tcgaggtaat ttctggtgga
                                                                     1260
gttgaacaca tcattaaatt tctatttgtg ttctgcctga ggcttttccc taaccactaa
                                                                     1320
ttgcaagtga aggtcccaga gagcttttgt gaaaggaaca gaacacaagc cacgtcctgg
                                                                     1380
tetgtageea ggtgteegtg taetgeataa tggaggaaga ggattaeagg gagattttea
                                                                     1440
cttcagcctt tagtccaacc aaaacttaaa agacttacag agaacagcct caggaggtta
                                                                     1500
ggggacagaa gtgtggtact gcaggaagac aagaggggta aacgtatcca gcagaatgta
                                                                     1560
aggataagaa acacccacat gaattettag aatacagagg aacaagaagg aataatteet
                                                                     1620
gtgccatatg cggaccaggg catagggtga gtggagcaca gtgggttagc cactaaatgg
                                                                     1680
cttcagtgag aattctgaaa actgttccag tataattttg gagtaaatcc ttctcctgga
                                                                     1740
caggicaaag acigigcitt tiaaaigica tiagaaggia acagcittit gcciccigci
                                                                     1800
tccagatgat ttccttttgg ttaaaaacca gaaatagtat aaacctcaca ggatgaaaga
                                                                     1860
acagtetttt gatacaggtg aggtggagat etagatgaae ttacatagta agtgaggagt
                                                                     1920
acatttcttg gtcttctccc ttgaccactc caagtctctg atctaccaga gatggcagtt
                                                                     1980
tatttcctct ggaagaagcc agtaatggac acctgtctgt tggctttgcc cagagcagca
                                                                     2040
gtecetttet tggggeeett tegtteetet etgggttett tttteaeagt catggeaggg
                                                                     2100
ggtctgtgta ctgaggatgt cttcatgtta agctcctctt cactatctgt gcaggattca
                                                                     2160
ctctcgtaga ctttttcagt cactatgcag ccttccccat ccaggtaagt tttagatttt
                                                                     2220
agtacgcgtt ttcgttttct tttgttttct ccacttgagc tcttgacaga aggaggttca
                                                                     2280
ggctcagtct ttggcactgg ttcaagaggt ggagacggag gaggaggtgg ggatggtgac
                                                                     2340
tragettrat aageccragg agagtetgga aagacttrat ettractget atragattra
                                                                     2400
ggaagtttga ttcttctcct ctttttcctc atgttttcag tttcctttgt ctcatcatca
                                                                     2460
```

```
gataatgcta etegetteec cettttttt teettetgea geacettaac aggetetget
                                                                     2520
                                                                     2580
tttttgctgg attttttcag gcctgcagga gttgccagct ttggttccgt gacagacact
gtaggetget ccactatttt ttettettte actgettgtt etgagteeaa attgaettta
                                                                     2640
aatttattca tagcagcttt tccaaaaaag ttgctcatca tattcccttt ccctggtgcc
                                                                     2700
ttgttgcctg ctgcagatgc atttgttact tctttagcct ctgttttcgt ttccttgttg
                                                                     2760
                                                                     2820
gtttcttggg ttttagcagc agctttggag gcaaacattc ccataattcc tttgggctgc
                                                                     2880
tgggaaacct gcttggatgc aggtgggcca tgaccattgg tggtcagctc attgttggct
                                                                     2940
tgtgtctcac ttgacatgtg aagatgtgac tgctcaaact ttttggaaga cgaagaggat
                                                                     3000
teageaggag etetggggae ggeagetgea cattgtatag caetaaattt getgeagtte
                                                                     3060
tgcaagttgc ttttaaggat gtcatagtca gtattgaaca gaggcccact gtcctttagc
                                                                     3120
atggetttet ggatgetgta cacatggatg etggeagtea cagetagett ggaetteact
                                                                     3180
gettecaatt tatettetet caetaetgea acettgtgge aggaatgtee attetgaatg
agactgccag acaccaagta ggtaacatgc agttgggctc ctgaattttc ttttcgtttc
                                                                     3240
                                                                     3300
ctttcaacat aatcatacag catctgtttg gcctggttaa catgaacccc tagtgtatag
ctcagccatt tgtatgtcac gatcttgttt tggtccgtga cgaactcgtc tatattttcc
                                                                     3360
agataaagct ggtccgccat ggtgcggcag cgctgggacc cgcctctaac ccctctctca
                                                                     3420
atcacageca cagetecege eggegggaaa egtet
                                                                     3455
```

```
<210> 5327
<211> 2102
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (26)...(1969)
<223> similar to gi4322263 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5327
accegggteg acgattegt etegececae eccaetggtg actgeeggge eccttgtgae
                                                                       60
ccccactcca gcagggaccc tcgaccccgc tgagaaacaa gaaacaggct gtcctccttt
                                                                      120
gggtctggag tccctgcgag tttcagatag ccggcttgag gcatccagca gccagtcctt
                                                                      180
tggtcttgga ccacaccgag gacggctcaa cattcagtca ggcctggagg acggcgatct
                                                                      240
atatgatgga gcctggtgtg ctgaggagca ggacgccgat ccatggtttc aggtggacgc
                                                                      300
tgggcacccc accegettet egggtgttat cacacaggge aggaactetg tetggaggta
                                                                      360
tgactgggtc acatcataca aggtccagtt cagcaatgac agtcggacct ggtggggaag
                                                                      420
taggaaccac agcagtggga tggacgcagt atttcctgcc aattcagacc cagaaactcc
                                                                      480
agtgctgaac ctcctgccgg agccccaggt ggcccgcttc attcgcctgc tgccccagac
                                                                      540
ctggctccag ggaggcgcgc cttgcctccg ggcagagatc ctggcctgcc cagtctcaga
                                                                      600
ecceaatgae etatteettg aggeceetge gtegggatee tetgaecete tagaetttea
                                                                      660
gcatcacaat tacaaggcca tgaggaagct gatgaagcag gtacaagagc aatgccccaa
                                                                      720
catcaccege atetacagea ttgggaagag ctaccaggge ctgaagetgt atgtgatgga
                                                                      780
aatgteggae aageetgggg ageatgaget gggggageet gaggtgeget aegtggetgg
                                                                      840
catgcatggg aacgaggccc tggggcggga gttgcttctg ctcctgatgc agttcctgtg
                                                                      900
ccatgagttc ctgcgaggga acccacgggt gacccggctg ctctctgaga tgcgcattca
                                                                      960
cctgctgccc tccatgaacc ctgatggcta tgagatcgcc taccaccggg gttcagagct
                                                                     1020
ggtgggctgg gccgagggcc gctggaacaa ccagagcatc gatcttaacc ataattttgc
                                                                     1080
tgacctcaac acaccactgt gggaagcaca ggacgatggg aaggtgcccc acatcgtccc
                                                                     1140
caaccatcac etgecattge ceaettacta caecetgece aatgecaceg tggeteetga
                                                                     1200
```

```
aacgcgggca gtaatcaagt ggatgaagcg gatccccttt gtgctaagtg ccaacctcca
                                                                     1260
                                                                     1320
cgggggtgag ctcgtggtgt cctacccatt cgacatgact cgcaccccgt gggctgcccg
cgagctcacg cccacaccag atgatgctgt gtttcgctgg ctcagcactg tctatgctgg
                                                                     1380
cagtaatctg gccatgcagg acaccagccg ccgaccctgc cacagccagg acttctccgt
                                                                     1440
                                                                     1500
gcacggcaac atcatcaacg gggctgactg gcacacggtc cccgggagca tgaatgactt
                                                                     1560
cagetaceta caéaceaact getttgaggt caetgtggag etgteetgtg acaagtteee
                                                                     1620
tcacgagaat gaattgcccc aggagtggga gaacaacaaa gacgccctcc tcacctacct
                                                                     1680
ggagcaggtg cgcatgggca ttgcaggagt ggtgagggac aaggacacgg agcttgggat
                                                                     1740
tgctgacgct gtcattgccg tggatgggat taaccatgac gtgaccacgg cgtggggcgg
                                                                     1800
ggattattgg cgtctgctga ccccagggga ctacatggtg actgccagtg ccgagggcta
                                                                     1860
ccattcagtg acacggaact gtcgggtcac ctttgaagag ggccccttcc cctgcaattt
                                                                     1920
cgtgctcacc aagactccca aacagaggct gcgcgagctg ctggcagctg gggccaaggt
                                                                     1980
gcccccggac cttcgcaggc gcctggagcg gctaagggga cagaaggatt gatacctgcg
gtttaagagc cctagggcag gctggacctg tcaagacggg aaggggaaga gtagagaggg
                                                                     2040
agggacaaag tgaggaaaag gtgctcatta aagctaccgg gcaccttagc ttaaaaaaaa
                                                                     2100
                                                                     2102
```

```
<210> 5328
<211> 2168
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1487)
<223> similar to gi3366802 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5328
gaatteteea eeacaacaaa cageeeacte eeatggeeta eetggacaag etggacetga
                                                                       60
cagacaacca tetgaceaca etgeceetgg etggaettgg gggettgatg catetgaage
                                                                      120
tcaaagggaa cettgetete teecaggeet tetecaagga cagttteeca aaactgagga
                                                                      180
tectggaggt geettatgee taccagtget gteectatgg gatgtgtgee agettettea
                                                                      240
aggeetetgg geagtgggag getgaagace tteacettga tgatgaggag tetteaaaaa
                                                                      300
ggcccctggg cctccttgcc agacaagcag agaaccacta tgaccaggac ctggatgagc
                                                                      360
tecagetgga gatggaggae teaaageeae acceeagtgt ceagtgtage cetacteeag
                                                                      420
gccccttcaa gccctgtgag tacctctttg aaagctgggg catccgcctg gccgtgtggg
                                                                      480
ccatcgtgtt gctctccgtg ctctgcaatg gactggtgct gctgaccgtg ttcgctggcg
                                                                      540
ggcctgcccc cctgcccccg gtcaagtttg tggtaggtgc gattgcaggc gccaacacct
                                                                      600
tgactggcat ttcctgtggc cttctagcct cagtcgatgc cctgaccttt ggtcagttct
                                                                      660
ctgagtacgg agcccgctgg gagacggggc taggctgccg ggccactggc ttcctggcag
                                                                      720
tacttgggtc ggaggcatcg gtgctgctgc tcactctggc cgcagtgcag tgcagcgtct
                                                                      780
eegteteetg tgteegggee tatgggaagt ceeeeteeet gggeagegtt egageagggg
                                                                      840
tectaggetg cetggeactg geagggetgg cegeegeact geecetggee teagtgggag
                                                                      900
aatacggggc ctccccactc tgcctgccct acgcgccacc tgagggtcag ccagcagccc
                                                                      960
tgggcttcac cgtggccctg gtgatgatga actccttctg tttcctggtc gtggccggtg
                                                                     1020
cctacatcaa actgtactgt gacctgccgc ggggcgactt tgaggccgtg tgggactgcg
                                                                     1080
ccatggtgag gcacgtggcc tggctcatct tcgcagacgg gctcctctac tgtcccgtgg
                                                                     1140
cettecteag ettegeetee atgetgggee tettecetgt caegeeegag geegteaagt
                                                                     1200
ctgtcctgct ggtggtgctg cccctgcctg cctgcctcaa cccactgctg tacctgctct
                                                                     1260
```

```
tcaaccccca cttccgggat gaccttcggc ggcttcggcc ccgcgcaggg gactcagggc
                                                                1320
                                                                1380
ccctagccta tgctgcggcc ggggagctgg agaagagctc ctgtgattct acccaggccc
tggtagcctt ctctgatgtg gatctcattc tggaagcttc tgaagctggg cggccccctg
                                                                1440
ggctggagac ctatggcttc ccctcagtga ccctcatctc ctgtcagcag ccaggggccc
                                                                1500
ccaggctgga gggcagccat tgtgtagagc cagaggggaa ccactttggg aacccccaac
                                                                1560
cctccatgga tggagaactg ctgctgaggg cagagggatc tacgccagca ggtggagget
                                                                1620
tgtcaggggg tggcggcttt cagccctctg gcttggcctt tgcttcacac gtgtaaatat
                                                                1680
coctcoccat tottototte coctctette cotttectet eteccocteg gtgaatgatg
                                                                1740
getgetteta aaacaaatae aaccaaaaet cageagtgtg atetatagea ggatggeeca
                                                                1800
gtecetgget ceactgatea ecteteteet gtgaccatea ecaacgggtg cetettggee
                                                                1860
tggctttccc ttggccttcc tcagcttcac cttgatactg ggcctcttcc ttgtcatgtc
                                                                1920
tgaagctgtg gaccagagac ctggactttt gtctgcttaa gggaaatgag ggaagtaaag
                                                                1980
acagtgaagg ggtggagggt tgatcagggc acagtggaca gggagacctc acagagaaag
                                                                2040
2100
attaatettg acatatgeea tgeataaaga etteetatta aaataagett tggaagagaa
                                                                2160
                                                                2168
```

```
<210> 5329
<211> 1116
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)...(284)
<223> similar to gi3413896 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5329
aatacatgtc ccctagcctt tgaccactgt cagccacctg tgtcccttga gccttcgggt
                                                                       60
etteaettee eacttggaca teaetgetgg acatteecat egagatgaca eetgggttee
                                                                      120
aatcccagct ctgcctttga agcacttgcg gccaccgtca agtccctttg ctctcggacc
                                                                      180
ctgggtttct catcctttaa tgaggtgggt tcagaagctc tcccatcttc acagcaaccc
                                                                      240
tggcactggc ttctcaatgg gagggaagca gcagagaaac tgaagtgtta gacactatqt
                                                                      300
gtcccaccac cccattacag agacatatga caatgttcag caggtcatct ttaatgcaga
                                                                      360
ggaggagatg ggatgteact egetgtetgg aggeaegtgg gtggtgtgeg ggeeeteact
                                                                      420
ggccagcctc tgggtggccc cgcctatccc agtatgaacg tagccaactc aagccctcta
                                                                      480
ctgtgtctca gcccacgaag cctttgtagc cttcatcttc cagcagttga aacagatagg
                                                                      540
ggaaattcag ctctccgggg ctgctgggct cccctcgacc tgggacctgt gccacctgca
                                                                      600
catgoccaac aatgggcagg aactcccgga tgtttcctgt caggttccca tccatgatct
                                                                      660
gccagtggaa tatgtccatt tgtaattgga ggttgggtct tcctaccttc tgtaagatgg
                                                                      720
etgeegeetg etggggegtg teeaggaagt aetgggggte agtgatgegg gtgttgatgg
                                                                      780
gctccagcag tcccacgagg tcctcctgag ccaaaacccc agctgcatgc ctcaggttct
                                                                      840
ccagaaaaac ggcctccatc tcagccttga ctgctattcg atcagctccc tggggtactc
                                                                      900
ggccagccat caggtggatc atgtccagcc tcaggaacgc tgccaaatac accaggcctc
                                                                      960
ctcttgccac agcacccttg caaggaacac tcaacttcct gcccatcaag caatgcccac
                                                                     1020
teegeaegge etgeteeagt eestetegga aggeegeatg teteeegggg aeggeaecea
                                                                     1080
gccccatttc ccccttctct tggtctcccg ggggcg
                                                                     1116
```

```
<210> 5330
<211> 4880
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3885)
<223> similar to gi4678724 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5330
atgtteeget teeetatggg geteetgett ggetetgtge teetggtgge tteggeeeea
                                                                       60
gccactctgg agcctcccgg ctgcagcaac aaggagcaac aggtcactgt cagccacacc
                                                                      120
tacaagateg atgtgeeeaa gtetgeettg gtteaggttg aegetgaeee teageeeete
                                                                      180
agtgacgatg gggcttcgct cttggccctg ggggaggcca gggaggaaca gaacatcatc
                                                                      240
ttcaggcaca acatccgcct tcagacgcca cagaaggact gcgagttggc aggcagtgtc
                                                                      300
caggacetee tggcccgggt gaagaagetg gaggaagaga tggtggagat gaaggaacag
                                                                      360
tgtagtgccc agcgctgctg ccagggagtc actgatctaa gccgccactg cagcggccac
                                                                      420
gggacettet ecetggagae etgeagetge eaetgegaag agggeaggga gggeeeegee
                                                                      480
tgcgagcggc tggcctgccc cggggcgtgc agcggccacg ggcgttgcgt ggacgggcgc
                                                                      540
tgcctgtgcc atgagcccta cgtgggtgcc gactgcggct acccggcctg ccctgagaac
                                                                      600
tgcagcggac acggcgagtg cgtgcgcggc gtgtgccagt gccacgaaga cttcatgtcg
                                                                      660
gaggactgca gegagaageg etgteeegge gaetgeageg gecaeggett etgtgacaeg
                                                                      720
ggcgagtgct actgcgagga gggcttcaca ggcctggact gtgcccaggt ggtcacccca
                                                                      780
cagggeetge agetgeteaa gaacaeggag gattetetge tggtgagetg ggageeetee
                                                                      840
agccaggtgg atcactacct cctcagctac tacccctgg ggaaggagct ctctgggaag
                                                                      900
cagatccaag tgcccaagga gcagcacagc tátgagattc ttggtttgct gcctggaacc
                                                                      960
aagtacatag tcaccctgcg taacgtcaag aatgaagttt ctagcagccc acagcatcta
                                                                     1020
cttgccacca cagacettge tgtgcttgge actgcctggg tgacagatga gactgagaac
                                                                     1080
tecettgaeg tggagtggga aaaceeetea aetgaggtgg aetaetaeaa getgegatat
                                                                     1140
ggccccatga caggacagga ggtagctgag gtcactgtgc ccaagagcag tgaccccaag
                                                                     1200
agecgatatg acateactgg tetgeaceeg gggaetgagt ataagateae ggtggtgeee
                                                                     1260
atgagaggag agetggaggg caageegate eteetgaatg geaggacaga aattgacagt
                                                                     1320
ccaaccaatg ttgtcactga tcgagtgact gaagacacag caactgtctc ctgggaccca
                                                                     1380
gtgcaggctg tcatagacaa gtatgtagtg cgctacactt ctgctgatgg ggacaccaag
                                                                     1440
gaaatggcag tgcacaagga tgagagcagc actgtcctga cgggcctgaa gccaggagag
                                                                     1500
gcatacaagg tctacgtgtg ggctgaaagg ggcaaccagg ggagcaagaa agctgacacc
                                                                     1560
aatgccctca cagaaattga cagcccagca aacctggtga ctgaccgggt gactgagaat
                                                                     1620
accyccacca teteetygya ceegytacay gecaecatty acaaytacyt gytyegetae
                                                                     1680
acctctgctg acgaccaaga gaccagagag gttctggtgg ggaaggagca gagcagcact
                                                                     1740
gtcctgacag gcctgaggcc aggtgtggag tacacagtgc atgtctgggc ccagaagggg
                                                                     1800
gaccgagaga gcaagaaggc tgacaccaac gcccgacag atattgacag ccccaaaaac
                                                                     1860
ctggtgactg accgggtgac agagaatatg gccacggtct cctgggaccc ggtgcaggcc
                                                                     1920
gccattgaca agtacgtggt gcgctacacc tctgctggtg gagagaccag ggaggttccg
                                                                     1980
gtggggaagg agcagagcag cacagtcctg acaggcctga gaccgggtat ggagtacatg
                                                                     2040
gtgcacgtgt gggcccagaa gggggaccag gagagcaaga aggccgacac caaggcccag
                                                                     2100
acagacattg acagececca aaacetggtg acegaceggg tgacagagaa tatggecact
                                                                     2160
gtctcctggg acceggtgcg ggccaccatt gacaggtatg tggtgcgcta cacctctgcc
                                                                     2220
aaggacggag agaccaggga ggttccggtg gggaaggagc agagtagcac tgtcctgacg
                                                                     2280
ggcctgaggc cgggtgtgga gtacacggtg cacgtgtggg cccagaaggg ggcccaggag
                                                                     2340
```

```
agcaagaagg ctgacaccaa ggcccagaca gacattgaca gcccccaaaa cctggtcact
                                                                     2400
gactgggtga cagagaatac agccactgtc tcctgggacc cggtgcaggc caccattgac
                                                                     2460
aggtatgtgg tgcactacac gtctgccaac ggaggacca gggaggttcc agtggggaag
                                                                     2520
gagcagagca gcactgtcct gacgggcctg aggccgggca tggagtacac ggtgcacgtg
                                                                     2580
tgggcccaga aggggaacca ggagagcaag aaggctgaca ccaaggccca gacagaaatt
                                                                     2640
gacggcccca aaaacctagt gactgactgg gtgacggaga atatggccac tgtctcctgg
                                                                     2700
gacceggtte aggecaccat tgacaagtac atggtgeget acacetetge tgacggagag
                                                                     2760
accagggagg ttccggtggg gaaggagcac agcagcactg tcctgacggg cctgagacca
                                                                     2820
ggcatggagt acatggtgca cgtgtgggcc cagaaggggg cccaggagag caagaaggct
                                                                     2880
gacaccaagg cccagacaga actcgaccct cccagaaacc ttcgtccatc tgctgtaacg
                                                                     2940
cagtetggtg geatattgae etggaegeee ecetetgete agatecaegg etacattetg
                                                                     3000
acttaccagt tcccagatgg cacagttaag gagatgcagc tgggacggga agaccagagg
                                                                     3060
tttgcgttgc aaggccttga gcaaggcgcc acctaccctg tctcccttgt tgcctttaag
                                                                     3120
ggtggtcgcc ggagcagaaa tgtatccacc acceteteca cagttggtgc cegtttecca
                                                                     3180
caccettegg actgeagtea ggtteageag aacageaatg cegecagtgg tetgtacace
                                                                     3240
atctacctgc atggcgatgc cagccggccc ctgcaggtgt actgtgacat ggaaacggac
                                                                     3300
ggaggtggct ggattgtctt ccagaggcgg aacactgggc agctggattt cttcaagcga
                                                                     3360
tggaggagct atgtggaagg ctttggggac cccatgaagg agttctggct tggacttgac
                                                                     3420
aagetacaca aceteaceae eggeaeteea gegeggtatg aggtgagagt ggatttacag
                                                                    -3480
actgccaatg aatctgccta tgctatatat gatttcttcc aagtggcctc cagcaaggag
                                                                     3540
eggtataage tgacagttgg gaaatacaga ggcacggcag gggatgetet taettaceae
                                                                     3600
aatggatgga agtttacaac ttttgacaga gacaacgata tcgcactcag caactgtgcc
                                                                     3660
ctgacacatc atggtggctg gtggtataag aactgccact tggccaaccc taatggcaga
                                                                     3720
tatggggaga ccaagcacag tgagggggtg aactgggagc cttggaaagg acatgaattc
                                                                     3780
tecatteett aegtggagtt gaaaateege eeteatgget acageaggga geetgteetg
                                                                     3840
ggcagaaaga agcggacgct gagaggaagg ctgcgaacgt tctgatggcc cgtgtgagca
                                                                     3900
gtcctcgcag gagacaccac cagctgtggc agcttggggc ggggtgggta gtggtcactg
                                                                     3960
eggtetggga gtgeteagat agecegeaga acaaateatg teaceaaget teaagecatg
                                                                     4020
gaggttcctt ccctctcacc tgcatttttg cccgtcttta tgagggtctt gaaaatcaaa
                                                                     4080
atagtagttg cacagtatgt gtaggaaaga cagtactgga acggcaaggt ttctcagctt
                                                                     4140
atcttcagca acatatatac tggattaggg caagagaagg aatcacccag cacttcacca
                                                                     4200
gttggaaatc tctggaaatt tacatctatg tatttaaagt tctgctaatg caaatctttt
                                                                     4260
ctctggaaag aagcacagag gaggagtttt gatgacccag gggttagggc tgagacaacc
                                                                     4320
ggacgtttgt cacctecttt cccattgggt ttttaggaaa acagtgtgaa cctccccctt
                                                                     4380
ttaatttctg gtgttatgag gaagaataaa ggggataaaa ggggctaaga tggactcatg
                                                                     4440
tttagctaag ttctgacttg tatccagcat gctggagacc aaagctgccg ccttactgct
                                                                     4500
attittaagt gedetetitt cagicattig cataattgeg tecatagage tgeatatgit
                                                                     4560
gtgaataaat totoactcat ttoaactttg aataatttga ctgtottgat aattggttoc
                                                                     4620
teccaaagae tettetgeaa eteccattea tgeccaceag geeteagaet ecetettte
                                                                     4680
ecegecetge actattggag ceetgggttt tgtgggagtg eteageaceg tgagtettae
                                                                     4740
tgtttgatcg gadagttagd aagatcagat cotttttgct tattttctat cactttggag
                                                                     4800
ggttttctgt agcaaaatca gtgaccaatg aagtaactta aattcctatt gaagaacaaa
                                                                     4860
aataataaac cacttgattt
                                                                     4880
```

```
<210> 5331
<211> 831
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (28)...(301)
<223> similar to gi19923 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5331
cactagteca gegtggtgga attececaga tgececteag tecegtttet eeccagatee
                                                                       60
acacctggcc ctcccctcc tgttccagaa tgcagcccag cccctctgcc atcctgtcct
                                                                      120
cctagcccgt ggtctccctc cacacacgcc agtccaggct ccttcccttg gtgcctgacc
                                                                      180
cctcctggct qccaqcagcc cccttctggc cactgcccac tgagggaggg ggcttcctct
                                                                      240
tacccetcce cageetggge caetgggeet ggtactgagg acetegetge caececaece
                                                                      300
cactetgeca tgetaegggg ggtggggggg eggteagtge atgetgttee tagtetgaaa
                                                                      360
cttgtgtcct gtgggtgcct ggtggggaac ccttgcggga aggcctggtg ggtttgtccc
                                                                      420
tgcttcccag ccagcctgtg tccccgggta tgggctgggg tctggcatgg gcctctgcag
                                                                      480
ctggccacag actgaggggc tccaaacagc actgggaaca gcctcagggt atctggttgg
                                                                      540
gggctgcaga caggggtggg gtcttctgct tggccttgac aggttgcagg caggttgtca
                                                                      600
geoggatetg caateteatg ggggettggg gtetteeegg eteatgaggt tatggeagaa
                                                                      660
ttcagetect ggtggctggg gactgggtcc cacetecetg etggetgttg gecettecea
                                                                      720
geatggeggt tgetteeect teagggeeag caggaetgge etgaatttet eectatetgg
                                                                      780
cgttgaaaca ccctcaatga gctaaccctc ctccaccagg cccccacctg g
                                                                      831
```

```
<210> 5332
<211> 1035
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (923)...(716)
<223> similar to gi297157 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5332
tttttttttt ttcaaatggc caaaagcaat ttaatttttg gaggaaaaac tgcataccca
                                                                       60
gtacaactta tatctcaggc gaaatgtctc aaaatcttcc tgctcattgg acaaaaactc
                                                                      120
agetteacea cattgecage egggagacea tgaaagggaa etggegeeae tgeeeceage
                                                                      180
tgcccttccc aggggcgaac ttcaccaaga tgtggaaatc ctgggcccac cccacaqtca
                                                                      240
gtcatcgctc catttcttcc tggcaccacc acctccatct ggcctgctcc ccaaccccc
                                                                      300
agaagcaggt gggcccaggc tccaggccag tgcccccatc aagatcagac gtaaggcatc
                                                                      360
ttcccaccgt cgctgtgctg cggggacttt tccaatcctt ccttcctctc tgtccagagg
                                                                      420
ctgccaggct gagggggcca ccgtccaggt ggaacaggca caggcatcgg ggaatcagat
                                                                      480
ggtatcagtg gggatagggc acagcacttt cctgggagcc atgtgacgcc agatcttcct
                                                                      540
ctggcagttc ccactggctg tgggaagtgg ttttcataaa gggggccaac ttccaggaac
                                                                      600
atctagggct cgggagcaac ccagcattga cagtgaatca gaatccacct agagctggcc
                                                                      660
atggcccagg cagggggtgt cttccccaca gcccccagga gtggctgcac ctagtgggcg
                                                                      720
cagcatttgg cctgcctcgc gggccccttg ttcagagcca cagctgcatc cccccgtaga
                                                                      780
gcctggccct cetegteget tetetgeagt agetettqqq ceactqtatt qaacacetee
                                                                      840
gacacctggt ggttcagttt ggccgaagtt tccatgaaca gcaacttctg gctgtcggca
                                                                      900
aacteettee etteetgaag gaaacageea caaaateeag egetgtttat aagagagttt
                                                                      960
cctaaggaca cctggttcac ttccaacagt aagatccgag aaagctgcag ccgtggagcc
                                                                     1020
```

```
<210> 5333
<211> 1200
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (8)...(716)
<223> similar to gi2507613 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<400> 5333 ctacagetca egeategtgg gtggaaacat gteettgete tegeagtgge eetggeagge 60 cagcetteag ttecaggget accacetgtg egggggetet gteateaege eeetgtggat catcactgct gcacactgtg tttatgactt gtacctcccc aagtcatgga ccatccaggt 180 gggtctagtt tccctgttgg acaatccagc cccatcccac ttggtggaga agattgtcta 240 ccacagcaag tacaagccaa agaggctggg caatgacatc gcccttatga agctggccgg 300 gccactcacg ttcaatgaaa tgatccagcc tgtgtgcctg cccaactctg aagagaactt 360 ccccgatgga aaagtgtgct ggacgtcagg atggggggcc acagaggatg gagcaggtga 420 egecteeect gteetgaace aegeggeegt ceetttgatt tecaacaaga tetgeaacea 480 cagggacgtg tacggtggca tcatctcccc ctccatgctc tgcgcgggct acctgacggg 540 tggcgtggac agctgccagg gggacagcgg ggggcccctg gtgtgtcaag agaggaggct 600 gtggaagtta gtgggagega ceagetttgg categgetge geagaggtga acaageetgg 660 ggtgtacacc cgtgtcacct ccttcctgga ctggatccac gagcagatgg agagagacct 720 aaaaacctga aaaggaaggg gacaagtagc cacctgagtt cctgaggtga tgaagacagc 780 cegatectec cetggactec egtgtaggaa cetgcacaeg ageagacaec ettggagete 840 tgagttccgg caccagtage aggecegaaa gaggcaeeet tecatetqat tecaqeaeaa 900 ccttcaagct gctttttgtt ttttgttttt ttgagatgga gtctcgctct gttgcccagg 960 ctggagtgca gtggcgaaat ccctgctcac tgcagcctcc gcttccctgg ttcaagcgat 1020 tetettgeet cagetteece agtagetggg accaeaggtg eeegeeacea caeceaacta 1080 atttttgtat ttttagtaga gacagggttt caccatgttg gccaggctgc tctcaaaccc 1140 ctgacctcaa atgatgtgcc tgcttcagcc tcccacagtg ctgggattac aggcatggc 1200

```
<210> 5334
<211> 3156
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3139)...(2740)
<223> similar to gi4150963 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5334 60 aacaccaggg tttttcccaa accccagggt gttaaaaccc ggcccccgga atttattttg 120 gggggcccta aaaaaaacct ttattttccc aaccccggtt attaaaaatg aaacctttta 180 aagggccccc cccttttttt tttttggcta agttgccctt tattaacgaa aacatagagc 240 tttcggtcaa ttccaccacg gagaacacaa accagagata aaacccacac caagggctat 300 ttcccaagct ggggaatttg agaacacacg ggcagagttc acgccacaca actacactgg 360 gctcgtcctt gggaggcgtt cacaggaagc aatcacgagc gccaagccac ccacaaggca 420 gtgcggcaag gctcccggga tccttacagg catccaagcg aggtacagaa acctccacag cagtggggat aaggggaaaa tattttctct tgctaaagaa tatccttagt tctcaacata 480 540 aacatgacta cgtatatatt cagcttcaaa tgaaaaacaa gtttacaaat cactactgga 600 tacttaaact ctatgttgct tttctttttg gcagcaccag cctaaactct gtgggtttgc 660 aatatttcag aaacttcagg tacattacag tcttctgaga aaggcccaga acttcagaat 720 tcctggagcg gctgtgaaga aagaacatta ctggcaacaa atattaaaac aacatttcaa 780 gaactccaag aatacactga gaggtttgta aaggtgcaca tatttaagca ttcaagctat 840 atcctaaatc atttttctgt taacgtattt atttttggct taggaaaaac atgtacttta ttggcaaatt gttttagctg tagacggatg gatgattcta cagccacact cccctttccg 900 ggtgtacatc cggggcctgt gcacctgcgc ggaatcaggc aactttgttt ttcccggtcc 960 ccaaaaagct cacctttgac acacctcta tatgcacagg aaaactgctc ttcttattca 1020 1080 gggtctcttt ttgtggtgga attcagagaa actgggttgc aacatctttt tagggagagg tegagtatgt titticatte gagtgaetet geatgettaa ggaatetgag teggtataaa 1140 ggactagace actgaattge gtacagegte ccaggatgee tgcageeeca gagtacaaac 1200 tgtagatget etegtggeet gaatgtggaa ttttaeceae cagaaageat taetggagee 1260 caaactggca actttaaata gctcaatgat atcggtacct tcccctttgg tttcaaaagc 1320 aatcatgacc gaacattttc aactgtgagg caaagctgac ttgcatacca aaaaacacct 1380 ttccaaaaac attcaatgag gtagctcaga tcaattatca aacccaagtg aataccaaga 1440 1500 agettaataa atgeteagge attttaaaat geaaattget acagtgeeta ataaatgete 1560 tttetteeca attettgeag gtgeatgeaa atgttgagga ggageecetg caaagtgagg 1620 acagcgagag getgggagtg aatgaagetg geaaggagea gagaggaggg ggtgeeetgg ggcacccaac ttaggetaaa gtgegeetge eeaccacaga getcaagtge aatcagetee 1680 agagaacaaa caccaagtag aactcagggc tcgatgggct gaaaagtggc cttgactcaa 1740 ggegetaggg aacceteage etggtgeatt cacattgaga tggaggeaat etaagataet 1800 tecettaaat getgagttgg tataaagtge tggeecaetg gaccagetea gggeagtete 1860 teaegtttte cagggeecca gagecaccet cectetagag gagtetggee cetgttgeec 1920 ccaccacacc accetgggtg ggttctggga gaggccatgc tcttagccac tcgtcccctg 1980 agtteteaeg gtetgeteag aggeaeagae tgetetttge tgggtagett tteggaggte 2040 gageteaaat geetteeatg tggagtettg gacaaaggga aaggtggeea caccaacceg 2100 ggcagcaata tgaattetgt gacttecage agtaagaaag agtteacaca cacacaaaca 2160 ttcatgtgca cagacacttt cacaacatac acacatgtac acacttaggt gcacataccc 2220 tcactcacac aggcacacac atgcatccac ttagtcaccc acacacaagt gcactcacac 2280 acacgcacgt gcacagagca gtgcacagcc actgggcaac atccccgggg gcaqcaagct 2340 2400 caggtgcagc cagggtaggg gtgggcggag tgcaggggcc tggagcaggg ctgggcggtg ttgcttgggg gaaggagccc tcgccccacc tcgccctggc tatctccctt tcctgtcctc 2460 2520 ateggeeace accaeegeac ceetgeecag eegggeacae tgaagacaag eagtgggaag 2580 gaaggcagca ggtcgcttgc gttaggtctc cgtcgtataa ttatcgtagg tcagcggagc cagtgccgga aaactgctcc accgcctggc gccgggatgg ggctctgtgc gcccttgctc 2640 cttatattta cccagaatgt ttttggcttc ttctgcatcc tgcaaagggc tctctccata 2700 ttetteette agecactgee gatactgatg gaceteatge tteteaaact cetggagetg 2760 tetetggaag eccaegttgg ggttggeaca ggateteeca geaegeaegg tgtgeaggge 2820 atcctcccag ccaaagtcag tgacggtcat gatgtatgcg atcaccagtg tcacgctcct 2880 ggagaccccg gccaggcagt gtacaaggca gctctcaccg cggagccggc actcgtgaat 2940 gaatttaata ctttctttga aatgtcttgt caggttttga gatggtgaat ccgctgctgg 3000 gatgcacagg tatttaactc cctccaacat aggcctggca ctatcgtgga cagacagaat 3060 atgtgtcacc ttgttcttgc tcaattgttc cgcgtctctg gcatctttga agttgccgat 3120 gtacaggccg ggcaggatct tgttcatccc attccc 3156

```
<210> 5335
<211> 1757
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1742)...(1110)
<223> similar to gi3881304 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5335
ttttttttt ttcagagctt aaaaaccaaa aggcagaaaa tagactttat tccaagacag
                                                                       60
atttgtaaaa gatgttttta aagggaaagg caagtcacgc tactaaatca aacattgttc
                                                                      120
acaatttetg gatetteete eteegeetgg caetgeaget gageettgge ggatatgete
                                                                      180
ggggccctcg gcgcagagga acttagcctc gattctcttc ctgaggggct tcttaacttt
                                                                      240
tecaagecag geagtgageg tggtgggagg etggggetgg tgeetgegga cagetecaga
                                                                      300
tggaatecca ggecaeggtg ettetagtgt ecceecageg agettgeggt gtggeaggeg
                                                                      360
gccaggaagg gccatgagca gggtggcctg aatgaaaacc gagggccgaa gccagcctga
                                                                      420
etceetegee taagetgggg eteggteega ggeacaegea tggeettgge cagacacaaa
                                                                      480
ccaagagact gccatgacag acagagcaga aacctcccga gcactgtgtt caagctaagc
                                                                      540
tttcctaaga cgggcttctc aggcgagacg tgacaccaga caccgtcgca tgttacttgg
                                                                      600
agagaacaga gacgtgcggg ccacagcggc ccaccaaagg ctgccatcca agctgagttc
                                                                      660
egeaggeete acetgeaget ggagagggae ettgeeetga teeteetggt aggtaeeege
                                                                      720
taagggatte aggacagage gtcacactge acgeagggte etcegecace accatecaag
                                                                      780
aaccccgggg ggctggccac gcgctggcct ctgccaagga gtgccagtgg ttcccgggac
                                                                      840
ggggccgccc aagcaggtga gggaggttta gatgaatgac ttggccaggg tcaccatgtg
                                                                      900
gtccacgcca catgccacgt ccacaggctc cccaggcatc gtcaccctcc atgggaaata
                                                                      960
ctggtcctcc aggcgaccga ttcccaggca ccctcggatg ttcttgcccc atacaaacag
                                                                     1020
eteteetttg ttggteagtg cageaaagtg getgagteea categgatge gggaaacetg
                                                                     1080
gatttctggg ttgaactccg tcaagccaaa gagagtgggt ggaatcattt cagggacggc
                                                                     1140
actiticcact aggittiggac ctiticccaag aattccatag ccccagacaa aaacatgtcc
                                                                     1200
tteteegttt aacaetgeae agecegtgee acegeatgea geetgtegea cetteeceae
                                                                     1260
tectgagaag tgtaagcage ggggcacatt cacetgtgtg gagteagtga cagaggecag
                                                                     1320
ctgcaggtac tccgagtttc cccaaccaaa aagtcctccg tcggcggaca cggccaggca 1380
gcaatcaccg taggtggcaa cttggataac gttcactccc gccaggtctc cacccagctt
                                                                     1440
ggtgggcgag ctggtgatat tgtagtgacc cagacctgtt tgcccatcag caccccatcc
                                                                     1500
acaagaatag actteteett tateegteag gaacagaeta tgateetgae cacaggegae
                                                                     1560
ctggaccacc tggccatcga agtcctgcat cctgtggact ctgtgacttt cactgtaaat
                                                                     1620
ttcattttcg accaectttc ttccacattg cccataagaa ttgtttccca tgctgaagac
                                                                     1680
teetteeetg teagteaaca caagagagtg ageteggeeg caggagaett geageaceeg
                                                                     1740
tgtctcctga ggtctgt
                                                                     1757
```

<210> 5336 <211> 459

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (29)...(368)
<223> similar to gi1370190 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<400> 5336 tctagtccag cgtggcggaa ttccagatgg tgtcatcgtc atgtacgatc tcacagacaa 60 gcagtegtte etgteggtee ggeggtgget gageagegtg gaggaagetg tgggagaeeg 120 ggtgcctgtt cttctgctgg gtaataagct tgacaacgag aaggagcggg aagtcccccg 180 gggcctcgga gagcagcttg ccacggagaa caatctgatc ttctatgaat gcagcgccta 240 ctctggtcac aacaccaaag agtccctgct ccatctggcc aggttcctca aggagcaaga 300 agacacagtg agagaggaca ccattcaggt cggccaccct gctaagaaga aatcctgctg 360 tggctgatag ggtcctacaa ggactgcccc cagcaaacct gaggtcacag agcctgccct 420 gatcctgcac acggctcctg cacagatgcc acccaccgg 459

```
<210> 5337
<211> 1885
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (27)...(1513)
<223> similar to gi436480 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 5337
attgatcacg ttggaggaat tcgcgtgact acgtgcgcca gacgtggaag ctggagggcg
                                                                      60
aggccctgga gcaggccatc atcagccagg ccccgcaggt ggagaagctc attgctacga
                                                                     120
cggcccacga gcggatgccc tggtaccaca gcagcctgac gcgtgaggag gccgagcgca
                                                                     180
aactttactc tggggcgcag accgacggca agttcctgct gaggccgcgg aaggagcagg
                                                                     240
geacataege cetgteeete atetatggga agaeggtgta ceaetaeete ateageeaag
                                                                     300
acaaggeggg caagtactge attecegagg geaceaagtt tgacaegete tggeagetgg
                                                                     360
tggagtatct gaagctgaag gcggacgggc tcatctactg cctgaaggag gcctgccca
                                                                     420
acagcagtgc cagcaacgcc tcaggggctg ctgctcccac actcccagcc cacccatcca
                                                                     480
cgttgactca tcctcagaga cgaatcgaca ccctcaactc agatggatac acccctgagc
                                                                     540
cagcacgcat aacgtcccca gacaaaccgc ggccgatgcc catggacacg agcqtqtatq
                                                                     600
agagececta cagegaceca gaggagetea aggacaagaa getetteetg aagegegata
                                                                     660
acctecteat agetgaeatt gaacttgget geggeaactt tqqeteaqtq eqeeaqqeq
                                                                     720
tgtaccgcat gcgcaagaag cagatcgacg tggccatcaa ggtgctgaag cagggcacgg
                                                                     780
agaaggcaga cacggaagag atgatgcgcg aggcgcagat catgcaccag ctggacaacc
                                                                     840
cctacatcgt gcggctcatt ggcgtctgcc aggccgaggc cctcatgctg gtcatggaga
                                                                     900
tggctggggg cgggccgctg cacaagttcc tggtcggcaa gagggaggag atccctgtga
                                                                     960
```

```
gcaatgtggc cgagctgctg caccaggtgt ccatggggat gaagtacctg gaggagaaga
                                                                     1020
actttgtgca ccgtgacctg gcggcccgca acgtcctgct ggttaaccgg cactacgcca
                                                                     1080
agatcagega etttggeete tecaaageae tgggtgeega egacagetae tacactgeee
                                                                     1140
getcagcagg gaagtggccg ctcaagtggt acgcacccga atgcatcaac ttccgcaagt
                                                                     1200
tetecageeg cagegatgte tggagetatg gggteaceat gtgggaggee ttgteetaeg
                                                                     1260
gccagaagcc ctacaagaag atgaaagggc cggaggtcat ggccttcatc gagcagggca
                                                                     1320
ageggatgga gtgcccacca gagtgtccac cegaactgta egeactcatg agtgactget
                                                                     1380
ggatetacaa gtgggaggat egeceegact teetgaeegt ggageagege atgegageet
                                                                     1440
gttactacag cctggccagc aaggtggaag ggcccccagg cagcacacag aaggctgagg
                                                                     1500
etgeetgtge etgageteee getgeecagg ggageettee aegeeggete tteeceaece
                                                                     1560
teageceeae eccaggicet geagtetgge tgageettge tiggitigtet ceacacaeag
                                                                     1620
ctgggctgtg gtaggggtg tctcaggcca caccggcctt gcattgcctg cctggcccc
                                                                     1680
tgtcctctct ggctggggag cagggaggtc cgggagggtg cggctgtgca gcctgtcctg
                                                                     1740
ggctggtggc tcccggaggg ccctgagctg agggcattgc ttacacggat gccttcccct
                                                                     1800
gggccctgac attggagcct gggcatcctc aggtggtcag gcgtagatca ccagaataaa
                                                                     1860
cccagcttcc ctcttgaaaa aaaaa
                                                                     1885
```

```
<210> 5338
<211> 1060
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(659)
<223> similar to gi5817223 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5338
eccageetet geceggggea ceceggeett ceaggeaege egggeeaeca tqqeaqeeaq
                                                                       60
ggettgeegg geegegatgg eegegaegge egegaeggeg egeeegggge teegggagag
                                                                      120
aaaggcgagg gcgggaggcc gggactgccg ggacctcgag gggaccccgg gccgcgagga
                                                                      180
gaggegggac cegeggggec caeegggeet geeggggagt geteggtgee teegegatee
                                                                      240
geetteageg ceaagegete egagageegg gtgeeteege egtetgaege accettgeee
                                                                      300
ttegacegeg tgetggtgaa egageaggga cattaegaeg eegteaeegg caagtteaee
                                                                      360
tgccaggtgc ctggggtcta ctacttcgcc gtccatgcca ccgtctaccg ggccagcctg
                                                                      420
cagtttgatc tggtgaagaa tggcgaatcc attgcctctt tcttccagtt tttcgggggg
                                                                      480
tggcccaagc cagceteget eteggggggg gecatggtga ggetggagee tgaggaceaa
                                                                      540
gtgtgggtgc aggtgggtgt gggtgactac attggcatct atgccagcat caagacagac
                                                                      600
agcaccttct ccggatttct ggtgtactcc gactggcaca gctccccagt ctttgcttag
                                                                      660
tgcccactgc aaagtgaget catgetetea etectagaag gagggtgtga ggetgacaac
                                                                      720
caggicatcc aggagggctg gcccccctgg aatattgtga atgactaggg aggtggggta
                                                                      780
gagcactete egteetgetg etggcaagga atgggaacag tggetgtetg egatcaggte
                                                                      840
tggcagcatg gggcagtggc tggatttctg cccaagacca gaggagtgtg ctgtgctggc
                                                                      900
aagtgtaagt cccccagttg ctctggtcca ggagcccacg gtggggtgct ctcttcctgg
                                                                      960
tectetgett etetggatee tecceacee eteetgetee tggggeegge cettttetea
                                                                     1020
gagatccact caataaacct aagaaccctc aaaaaaaaa
                                                                     1060
```

```
<210> 5339
<211> 2481
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (500)...(848)
<223> similar to gi5668598 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5339 tggcgaattc attatagacg tgagccatca cacccagcca cagtttgaga ctttatgatt 60 taggcagtigc aaagcetttg aaaaaactgg atcaagtttt tacggaggtt ggtgagttgg 120 tgctatgcaa aatgaatttg gaggggtaag agacaaagca aggagaacat tcggaaggct 180 tttgcagtag agaacaggct aaatataagg aagacctgaa ttagaattgc ggaggaaggc 240 atggaaaagc aagaaaaaaa tcaagaacag atagggctct gactgactgg taggaaatgt 300 aaaaaggcca tacatttatt ctgaatgttg gtatctggaa gaatggtgat gctgttcaag 360 taataaggac aaaggggaac caggcactgt gagcctctgt ggggtgtgtt actcttttag 420 ctcatgtgtt tcaagtcatt ctaccccttg ccgtctccac atccaaacct aactactttg 480 gattttaatt gcagctcctc cacccccacc acctgtgatc cgaaatggtg ccagggatgc 540 tecceetece ceaceaceat acegaatgea tgggteagaa ecceegagee gaggaaagee 600 cccacctcca ccctcaagga cgccagctgg gccaccccct cctcctccac cgcccctgag 660 gaatggccac agagattcta tcaccactgt ccggtctttc ttggatgatt ttgagtcaaa 720 gtattccttc catccagtag aagactttcc tgctccagaa gaatataaac actttcagag 780 gatatatece ageaaaacaa acegagetge cegtggagee ceaectetge cacceattet 840 caggigaage ciggetiggi ecegiteete aggaaaagga iggaeettei ettettetea 900 gatggtccct tccattcccc tgaaacctgc atgagagctc ctaacatgtt tctccaatgc 960 aatcaagccc tagactccaa atgtcctccc agctcacctc catctatgca tctcatctct 1020 ggatttggtg atcagactct atattgacag taggatctca aaccctgcat ccatccttcc 1080 tccagcaagc cctgctagcc acatgaggaa caagtttccg tgtcttctgc cttcctcttg 1140 gggaaaggtg ccttgttgtg atgaattaac tcactgttag ggcagggtgg agaatggtac 1200 tectteette tectgteeac tgtgggggaa gettggeagg tatattatat tteateattt 1260 1320 aggagtttgc caagaagtga tctgttttaa aggtcatatt tggagaaagg gcaaggaatt 1380 gggtctgctt tatttttggg ggtattttgt ttttgttctc acctgctgcc ccccacccc 1440 accacccag ggataaattg gatataaaca ctaaatacta atcagttgaa cttaacattt 1500 aataaaaaga aagggtgaaa taaactgaag accattttag aactagtcag ttctctgcag 1560 caaagggaac aggagccatt tgaaccctct gggacccctc accccactgc ttcagggtgc 1620 taggctgagg gatgtttttc ctcccctta ccgcccatgc ccttgaaaga aaagtcactt 1680 tttgtggagg gcatcattca ttcctgattc acaaacccca aaaacctctg gtgggagata 1740 ggaagatagg gcgtgggcct gggccttaac ctcaatcttg tgtctgcctc agtcttttct 1800 gactggccct gaagttgtca gtggctcttt ctgtccttca gcccctggaa ggtgctccag 1860 gataacaaag aagggcaggt tgaagcccct catggaagga gctggctttg tggggctgca 1920 aaggactttt aagteetgee tgtactgaag tteacageee acetgactga geagactett 1980 cctgttcctt tctctaccac ccttgccttc ccaggactgc acggtttaac acagcagagt 2040 acagaagggt gaagaagtga gcagaggctt atgaagatat tcagatactc ttctatgcca 2100 2160 ccataggttg tttctttgtc ttccgggtcc taaagagcac agagaaaatg gaggtcccca 2220 gtctaggtag gaagctgatt ggatgaggac ttctttttt ccgacagcag gatggggctc 2280 ttgggctcca cacaccagat gctttggttt tctacaactg ttgctatgtg tagagggtgc 2340 tcagagcgtg gcatgagagc aaggagacca tggctactct ttgaaatgga tggggaaaat 2400

tagcttaaaa atttaatcac gagattgcgc cactgcactc cagcctgggc gacagagcca 2460 gactccgtct caaaaaaaaa a 2481

```
<210> 5340
<211> 442
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (75)...(445)
<223> similar to gill84790 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

agaggagegg geegaggaet eeagegtgee caggtetgge ateetgeaet tgetgeeete 60 tgacacctgg gaagatggcc ggcccgtgga ccttcaccct tctctqtqqt ttqctqqcaq 120 ccaccttgat ccaagccacc ctcagtccca ctgcagttct catcctcggc ccaaaagtca 180 tcaaagaaaa gctgacacag gagctgaagg accacaacgc caccagcatc ctgcaqcagc 240 tgccgctgct cagtgccatg cgggaaaagc cagccggagg catccctgtg ctgggcagcc 300 tggtgaacac cgtcctgaag cacatcatct ggctgaaggt catcacagct aacatcctcc 360 agetgeaggt gaageeeteg gecaatgaee aggagetget agteaagate eecetggaea 420 4 tggtggctgg attcaacacg cc 442

```
<210> 5341
<211> 1497
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (983)...(1262)
<223> similar to gi495222 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5341

cggtggcatt cgttgtggag tgaatgtaag ttggacacag aaaatccctc ataatatcct 60

cctgtttggt tgtatagtgg cctatgagca gattctgtgg cttagactcc cagtcccatg 120

gttcctggct cctgatgtct tttcccataa cattttgaca ttccaacaaa ctctaattag 180

ctgaatgatc aatcacagaa atgtaaatgt agaagcgaat ttacagatca tacagctcca 240

ccctgtaaat aaaccaggat gattagggta ttcacgatat tgcagattgg ccagctcatg 300

acttgcctt tgttcctagc tctgtgcctg gcctcagagg agagccttgg tgcacgtttg 360

actttttaat ctttatttga acctgttaca caccgtcacc cccactgctc tgcttgccac
```

```
agacatggaa ggttcactaa ggccttaagg cactcatgca agctcacaag agaaagaaat
                                                                      480
ctgtaaggca tgtagaattt ggactcaatc atgttggtct ttaatgtgcc tagagcaatg
                                                                      540
gaatgggcac tttgggggcg gtggaattca agacgctctg gctgaagatt cagaagtatc
                                                                      600
tggtaactct cttttccttc tgggcatcct ctcctctgtt ctaatcctcc cttacactca
                                                                      660
ttcctggtcc attgtattct gaccacatcc ttaatcatgg tcaaaactat tgagtcctgg
                                                                      720
gcacattggt catgaaggaa caagaaggca atgagagact ctcatgccaa ccactgccct
                                                                      780
gaaagccctg ctgttcagac agcaaagggg ccagcactgg ccaagctctt atgcttgctc
                                                                      840
tgaaaccttc ttgggaggag tcaatagggt ctccttttga aagtgtccct ggccttttga
                                                                      900
gaaagcagtg tggtggaggg agatggttct ggcaggggcc gtgaatggtt gttttctact
                                                                      960
tgggatttct ttcctgcttt aggagatcta ttgggaaact gattataacc actcgggcac
                                                                     1020
catcgatgcc cacgagatga ggacagccct caggaaggca ggtttcaccc tcaacagcca
                                                                     1080
ggtgcagcag accattgccc tgcggtatgc gtgcagcaag ctcggcatca actttgacag
                                                                     1140
cttcgtggct tgtatgatcc gcctggagac cctcttcaaa ctattcagcc ttctggacga
                                                                     1200
agacaaggat ggcatggttc agctctctct ggccgagtgg ctgtgctgcg tgttggtctg
                                                                     1260
accoggggtt toggacatca gtgacactco otgococact gottgottot tgtcaccoct
                                                                     1320
tctctacaat tttgtgaaca tttatgctcc agtggcattc actggttgtt catacctttc
                                                                     1380
ttgccctggg tctatttcag cagcactgag ctatgagcta tgtaagccga cccggtgggc
                                                                     1440
ccaagtggag ggaaagcaat caattaaagt tgtgagccag aatggtaaaa aaaaaaa
                                                                     1497
```

```
<210> 5342
<211> 1968
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (208)...(1822)
<223> similar to gi4008355 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5342
acactatett tttgcaaaaa atgaaaettt taatecacat ttaaaaataa ggetgtggga
                                                                       60
ttttggagaa gcattttaaa aacttgagga ctttatatgt tactcctggg aggttaaaca
                                                                      120
ttgtttcaga ctaatagaac tagcattatt aacgtgctga ctctaactga atttgttttg
                                                                      180
ttctctctct actaggtgat tcgtgaagct aagagaacag caccaagtat agtgtatgtt
                                                                      240
cctcatatcc acgtgtggtg ggaaatagtt ggaccgacac ttacagccac atttaccaca
                                                                      300
ttattacaga atatteette atttgeteea gttttaetae ttgeaactte tgacaaacce
                                                                      360
cattccgctt tgccagaaga ggtgcaagaa ttgtttatcc gtgattatgg agagattttt
                                                                      420
aatgtccagt taccggataa agaagaacgg acaaaatttt ttgaagattt aattctaaaa
                                                                      480
caagctgcta agcctcctat atcaaaaaag aaagcágttt tgcaggcttt ggaggtactc
                                                                      540
ccagtagcac caccacctga gccaagatca ctgacagcag aagaagtgaa acgactagaa
                                                                      600
gaacaagaag aagatacatt tagagaactg aggattttct taagaaatgt tacacatagg
                                                                      660
cttgctattg acaagcgatt ccgagtgttt actaagcctg ttgaccctga tgaggttcct
                                                                      720
gattatgtca ctgtaataaa gcaaccaatg gacctttcat ctgtaatcag taaaattgat
                                                                      780
ctacacaagt atctgactgt gaaagactat ttgagagata ttgatctaat ctgtagtaat
                                                                      840
gccttagaat acaatccaga tagagatcct ggagatcgtc ttattaggca tagagcctgt
                                                                      900
gctttaagag atactgccta tgccataatt aaagaagaac ttgatgaaga ctttgagcag
                                                                      960
ctctgtgaag aaattcagga atctagaaag aaaagaggtt gtagctcctc caaatatgcc
                                                                     1020
ccgtcttact accatgtgat gccaaagcaa aattccactc ttgttggtga taaaagatca
                                                                     1080
gacccagage agaatgaaaa getaaagaca eegagtaete etgtggettg eageacteet
                                                                     1140
```

```
gctcagttga agaggaaaat tcgcaaaaag tcaaactggt acttaggcac cataaaaaag
                                                                     1200
cgaaggaaga tttcacaggc aaaggatgat agccagaatg ccatagatca caaaattgag
                                                                     1260
agtgatacag aggaaactca agacacaagt gtagatcata atgagaccgg aaacacagga
                                                                     1320
gagtettegg tggaagaaaa tgaaaaacag caaaatgeet etgaaageaa aetggaattg
                                                                     1380
agaaataatt caaatacttg taatatagag aatgagcttg aagactctag gaagactaca
                                                                     1440
gcatgtacag aattgagaga caagattgct tgtaatggag atgcttctag ctctcagata
                                                                     1500
atacatattt ctgatgaaaa tgaaggaaaa gaaatgtgtg ttctgcgaat gactcgagct
                                                                     1560
agacgttccc aggtagaaca gcagcagctc atcactgttg aaaaggcttt ggcaattctt
                                                                     1620
totcagoota caccotcact tgttgtggat catgagogat taaaaaaatot tttgaagact
                                                                     1680
gttgttaaaa aaagtcaaaa ctacaacata tttcagttgg aaaatttgta tgcagtaatc
                                                                     1740
agccaatgta tttatcggca tcgcaaggac catgataaaa catcacttat tcagaaaatg
                                                                     1800
gagcaagagg tagaaaactt cagttgttcc agatgatgat gtcatggtat cgagtattct
                                                                     1860
ttatattcag ttcctattta agtcattttt gtcatgtccg cctaattgat gtagtatgaa
                                                                     1920
accetgeate titaaggaaa agattaaaat agtaaaataa aaaaaaaa
                                                                     1968
```

```
<210> 5343
<211> 504
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (507)...(300)
<223> similar to gi4699967 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5343
geggeegeag gagaageege ggttggegea ggaegeaggt getgtagteg aagegeteag
                                                                       60
getggetgge tegeegetgg gecagaagee egeactgeae aacegtgttg eeettggaga
                                                                      120
getecaggag tgggtgggea gtggeagggt ecaaettgag aggeteeggg getggeaaaa
                                                                      180
ctttccggaa gagccttttc cacacggtca gcttgatgtc agcctggtgg aggcctggct
                                                                      240
tgaaggagat ggggctgaat gcgccttcta ggggccgggc ctgcggcatc tctgctctgg
                                                                      300
aggecatgga gtggaaette eggatgaaet tgtggtggte eteattgeeg aaetgtteea
                                                                      360
geacacacte ggettgggee ageegeteee gggtteeetg ggeetgetee agetgeatgt
                                                                      420
ccagggaggc caccaggcca cgggtgtgac cccctatccc ctccaggcag cgggccttct
                                                                      480
cctcatccac caggtggtgc agct
                                                                      504
```

```
<210> 5344
<211> 929
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(464)
<223> similar to gi452987 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5344
gaattccaac agccategca etggaetgeg acetgaggge cagecaggee gegetetteg
                                                                       60
agaagaacaa ggagctggca gacctgaagc atgtgcatgg ctatctgaag aagcagttcc
                                                                      120
aggagaaggt ggcagagctg gcacatgcca accggcgggt ggagcagcac gaggctgagg
                                                                      180
tgaagaagct gcggctgcgg gtggaggagc tcaagaagga gctggcccag gctgaggacg
                                                                      240
agctggacga ggcccacaac caggcacgta agctgcagcg gtcgctggac gagcagacgg
                                                                      300
agcagagega gaacetgeaa gtgeaactgg agcacetgea gtecaggete egcaggeage
                                                                      360
ageagaacge teceetette gggaagatee geagtgeteg etttggeace gaggaggeeg
                                                                      420
aggatggaac cagtgacetg gacgaggacg aggacetgca aatecaggtg geetagaget
                                                                      480
tectgtgget gggeaggatg ggeegeeeca tacetgeeca gggteeagge taaceageea
                                                                      540
ctcaaactga tgcagtgcct aggctcactc tgggaccagt ccctgccaca gccgactttc
                                                                      600
ttetetecca gggatggegt caacagtece acetaccaac geeetgtgga aaggaageet
                                                                      660
atgttttata tatatatata cacacacgcg cgcgcgcgcg cgcgcgcaca cccagaagtc
                                                                      720
tttggaccca tttggtttta taaatacagg acageteeaa ggeeeagtee agatgacete
                                                                      780
acceaccag gaetteatge agggetggge atgttggggg cagttgttgg agececacce
                                                                      840
tgggctgcct ctctaggctt cgctgttcat catacaatgc agtgaaccca gttatttgta
                                                                      900
ataaatgaag ttcaagttca aaaaaaaaa
                                                                      929
     <210> 5345
     <211> 2863
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1) ... (2864)
     <223> n = a,t,c or g
     <220>
     <221> misc_feature
     <222> (2)...(693)
     <223> similar to gi3878629 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5345
cacgctggtg aaggagggag gcagagttgt ggccgacctg tcttgcgtgg gagatgagta
                                                                       60
cattgccgcg ctgggcgggg caggagggaa aggcaaccgc ttcttcctgg ccaacaacaa
                                                                      120
eegtgeeeet gtgaeetgta eeeetggaea geeaggaeag eagegagtte teeaeetgga
                                                                      180
gctcaagacg gtggcccacg ccggaatggt gggattcccc aacgccggga agtcctcact
                                                                      240
geteegggee attteaaaeg eeagaeeege egtggettee taeeegttea eeaceetgaa
                                                                      300
gccccacgtc gggatcgtcc actacgaagg ccacctacaa atagcagtgg ccgacatccc
                                                                      360
cggcatcata cgaggcgccc accagaacag gggtctgggg tccgccttcc tcaggcacat.
                                                                      420
```

480

540

600

cgagcgctgc cgctttctct tgttcgtggt ggatctttct cagcctgagc cgtggactca

agttgacgat ttaaaatatg aactggagat gtatgaaaag ggcctgtctg cgaggcccca

egeaategte geaaacaaga ttgaceteee tgaageeeaa geeaatetgt eeeageteeg

```
ggatcacttg ggacaggagg tcatcgtgct gtcggcgttg accggcgaga acctggagca
                                                                    660
                                                                    720
getgetgttg cacetgaagg tgetgtatga egeetaegeg gaggeegage tgggeeaggg
cegecageeg etcaggtggt agecaegeea gageggggte geetetggge etetgtetga
                                                                    780
gcaaacctgg gtgtgaattc ggtggttttg aatgcataaa gtgccttgtg gacacggggg
                                                                    840
agttgtggtg cttctgggtc tctgggcccc gcctgcttgg cctgaaatgc cctcatgttg
                                                                    900
ggaagcattc cgtgccccct accccgcctg ccctcccgta tttacttgca cctgtcagcc
                                                                    960
                                                                   1020
ctgcaccgga cttgantgag ccagtttgct catttgtgct gattaacacc cctaataagg
                                                                   1080
ggtttggggg ttgcccataa acggggttgg ccctgccgct gactcgggtc tccgccatgc
                                                                   1140
acgcgtggac tctcggatga gctcagcaga accgcacagc cagagcccca ggtcagaagt
                                                                   1200
gcagaccagg gttctcagca cagtgcccgt cgtgcttcca tggcttgcta cggagagaga
cctctggatc cacactgggg ctgcgtctgg cccgttgtcc agcagccctg cggtaccgca
                                                                   1260
ageccaggea ecagtgtete ggggggeete actgetgege aaggggtggg geegaggatg
                                                                   1320 -
caagtccagg cagageggeg caggeagetg tgagetttte tecateagee gtetgagaag
                                                                   1380
ageagtgagg ceagetgett cetgteette agaacaette tetgtgetea gtgggageea
                                                                   1440
ggaagcctca ggcttcacga ctgaatgcac ccaatatccg acctggctgc gtgtttctgg
                                                                   1500
ctgggctgcc gtgtgcacag caagttaact agaggggctg tgggccatgg aactgtcagc
                                                                   1560
gttattetea gaaggeggee gtggeatggg cagggtatag tgaggagtgg aaggagaegt
                                                                   1620
gtgcctggta atatggggcg gaatttccac tcagctccat ttgctgggga tttaaagaga
                                                                   1680
accettgtge tgegeeagge agttacegag eegaagggag atgatgggee ttegeeeete
                                                                   1740
agtgggatgg cagctgaggg ggccctgcat ttgaccctcg agactgcagc agcgcctttc
                                                                   1800
etgtetgtgg tttaagtett tgeagteaag tactgatgea tecaageeag geetatgeet
                                                                   1860
ggtgtctccc tgactgcaga ggagccccag ggcaaggaca gctcagctgc tggcagcctg
                                                                   1920
cctggcccat agacatcccc caagtagtet caggcctctg acatgtccct gaggggcccc
                                                                   1980
taagaaagaa agtggagggg acactccaga ggctgtcgtg ggaggatcat gtgagcctgg
                                                                   2040
gaggtcaagg ctgcagtgag ccgtgattgc accactgcac tccagcctga gtgacagagc
                                                                   2100
gagaccetgt etcaaaaaac aaacaaacaa acaaacaaaa acagaacatt etgggeacgg
                                                                   2160
tggctcatgc ctgtagtccc agcactttgg gaggccgagg ctggtggatc acaaggtcag
                                                                   2220
gagattgaga ccatcctggc taacacagtg aaaccccgtc tctactaaaa atacaaaaaa
                                                                   2280
attagccagg cgtggtggcg gtcacctgta gtcccagcta ctcgggaggc tgaagcagga
                                                                   2340
gaatggcgtg aacctgggag gcggagcttg cagtgagccg agatcacacc actgcactcc
                                                                   2400
2460
aatactggaa acaaccaata ttccatcaac aggagaatga ataaacaaat tgtggtatag
                                                                   2520
ctatacaatc caatactatg cagcaataaa aattgaatca atcactgata cacataacat
                                                                   2580
gcaaggatga agctcaaaaa cattacactg aacaaaagag gccagacaca acagtatgtc
                                                                   2640
tgagtccatt tacatgaaat tctaggaaag gtagaatatc ctacagtgta gagaacacaa
                                                                   2700
taataagaaa acaaacaacc tgatttaaaa ataggcaaac caagagtagt agtgtgtgcc
                                                                   2760
tgtagtccca actacttggg aggctgaggc gggaggatcc cctaagccca ggagctcaag
                                                                   2820
acctgcctgg gcaacatagc aagactctgt ctcaaaaaaa aaa
                                                                   2863
```

```
<210> 5346
<211> 618
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (10)...(616)
<223> similar to gi5923801 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5346
gaattettga aggaaaagga gaaattagaa atggagttag cagcagtgcg gactgcaagt
                                                                60
120
gtcatcaagc tggaagagga gttacgagag aagcaagcat atgttgagaa agttgagaag
                                                                180
ctgcagcagg ccctgaccca gctgcagtct gcatgtgaga agcgagaaca gatggagcgg
                                                                240
agactgcgga cttggctgga gagagagctg gatgcactga gaacccagca gaaacatgga
                                                                300
aatggccagc cagccaacat gccggaatac aatgccccag ccctcctgga acttgtgcgg
                                                                360
gagaaggagg agcggatcct ggccctggag gccgacatga caaagtggga gcagaagtac
                                                                420
ctggaggaga gcaccatccg acactttgcc atgaatgccg cagccactgc agcagctgag
                                                                480
agggacacca cgatcatcaa ccactcacgg aatggcagct acggagagag ctcgctggag
                                                                540
                                                                600
gcccacatct ggcaagagga ggaggaggtg gtgcaggcca acagaaggtg tcaggacatg
gaatacacta ttaaaaat
                                                                618
```

```
<210> 5347
<211> 1356
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1336)...(283)
<223> similar to gi5689493 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5347
ttttttttt ttttctcttt aaattatttt attcaagaag tgggggggga cagacaaggg
                                                                       60
gactgagetg ageectgagt ceetgaaeet eecageteag eeceeaage aggactggae
                                                                      120
tcaaagtcag agggtggaga ctccagcccc acccagacac ggttggggac agacaggacc
                                                                      180
cagggaatac cgactgactg tectecaggg ggatggegge egeageaeae agggeeegge
                                                                      240
ccgtggaccg cccgggtggg gctatttggg ggtgccgccg cccttcttgg gagtggtggg
                                                                      300
tttcttgccc tgccagaggt gtccctggat ggtgaaggca tcgacgctca tggacatggt
                                                                      360
ettggegggg atetgggtga agegettgeg gteegagttg taettgtaga tgeetteeae
                                                                      420
catggcgggc gtgacggtcc ggggcccata ccctgccagc cgcgacagct cctctgtctc
                                                                      480
eccegacage gigitagageg ecceggaacig geagetegag tegegaaaga ggaicaggaa
                                                                      540
gtggttggcc ttgcttttct caatttcctc cagaatgcga ttcttctgcg gttcgttcac
                                                                      600
ettgeeegee aggeageagt gtgataggge attgtggatg atgaacttgt tggaettgge
                                                                      660
gctgggttct ttgtacagcc gtggacctgt gtactcgggc actgacgctg gggaggaggc
                                                                      720
attgctgcca ttttcccagt cccgttcgcg gcttccaggc aggcggcttg gggacatgag
                                                                      780
acctgacggg gagggagece gagacgtggg cetetteace eegaggttat tgtgggeete
                                                                      840
gttggccaca gtggacagtg acagggtgga ctgggaatag attttgctca gccgagagcc
                                                                      900
cagcaggceg egggetggge ttegtgecag ggetgagteg teacagcaac eegagegagg
                                                                      960
cegggtggcc etcegecege eccgaectgg acceeggae eccgeagece ggggeegeag
                                                                     1020
caccttateg aggtegteea teagetteag etgggeeegg egetegtaet eetgeegegt
                                                                     1080
gaagtccccc ttccgggggc ccgcctcctc ctcggctgga gcccgggcag caggggctgg
                                                                     1140
agtegecate gggaetgegg acacaagegg ggetgggeee ggggeeteet ettgggeeag
                                                                     1200
ectegeggee tectecetee getgtteett etecacetee agacaeggee tgegeegeeg
                                                                     1260
cgcctcctgt gctggccgat aaacccgctc aaacaggctg gaccgctttt gggccatctc
                                                                     1320
gtccgcaggc ttgcgaaatc tccgcgatga tcagaa
                                                                     1356
```

```
<210> 5348
<211> 2038
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1836)...(833)
<223> similar to gil663698 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5348
gaagtagatg tgacccacct ggatgtatgg gttttgtatt gggcgccagc aggctccagc
                                                                       60
decacetgga gggaetgeea eeaggggeae eageagaggg aageegteee aggaetgeeg
                                                                      120
gatggaccct gctccaaact cagcctgctc tccttgtgac agcagagcct ttgcaattcc
                                                                      180
tgagggtcat catggggcag gagacagaca gtcctgtagg atctgtggtt gtctcctttt
                                                                      240
gacaatetea etgttetteg tgeetgeeet ecaaatteag tageatgtet caaageetta
                                                                      300
catctctcgg cacccagagt tcagtgcatt tccaacctgt gcacctggcc tgtgcaacca
                                                                      360
eccageetet tetgggggae teactetece tggetgagge tetgtetett ttgtgtetee
                                                                      420
aaagctgctg tetecegaee tggggeagga ggggetgagg atacetetet tgggtaatag
                                                                      480
teeetetegg etgaageage teetgetggg eeaggegate acagggeatg etgggeagag
                                                                      540
gggetetgge eggetteate tteccaectg etceteeggg tgtetecete tetegeagee
                                                                      600
gggatetgca tggcgtetca tetegattge tgtgtgaaaa teaggtgaaa tgaggeetgg
                                                                      .660
tggggctgtg gattggcacc tggatcttcc attgtcagcc agctgcagtt ttgctcagtt
                                                                      720
tacgtgggtc aaaaaaacaa aaaacaagga tgggtcaaca tcctgtttct ttttcacttt
                                                                      780
ttaagettta accaetegag ttgtggatet tggggeetet ettgattagg ggttaecaaa
                                                                      840
caattcatca ageteetgea tecaetegte ceetggeeeg cetttgatga tggagteeae
                                                                      900
aaggtetgea eegteeggga ggeeagggaa ggaaceeeca geteegtege eactgtaatt
                                                                      960
gtatgacacg teetgagggg catteegete ataggettgg etetggetge ttggageaaa
                                                                     1020
getgecactg ggtatetget getgtgetgg gggetggetg aacgetggea tgeetgggae
                                                                     1080
tecctggete aggecagaea tgaccattgg eetegeetgg etggtgeett getgeeegg
                                                                     1140
gagegatgge ateatetgee gacceatgge agetgggttg agggteetea etgtgeeegt
                                                                     1200
gttagcatcc acgactgact ggctcagtcc ctgtgggaag tgctgcttgg tcagtctcgg
                                                                     1260
ctgcccagct tgaagagggt agctggcgcc attgttgaat ggtcccaatt ctccactagt
                                                                     1320
ceteceagge atgreetgea agetectetg ttgecagett tgtgeteett getggaetgt
                                                                     1380
teccataagg etetgeagee ttggagggee ttggggeeta ggeaaggeet ggeetaetgg
                                                                     1440
ccctttcatc tgtggatgtt gctgggtaat ggctgagttc accagcatgc tctgaccaaa
                                                                     15,00
gccactcacc attccaaccc cctgcccaga ggcaggttgc ctcggtccct gggcttggtt
                                                                     1560
atgtgtgatg ctcatgccac tttggtttgg atgctgcaac atttgggtca tgcctgtgct
                                                                     1620
catattgtac attectggtt ggctggtagg cgtggtgcta taaggggcca gtcccatctc
                                                                     1680
cgactgcgca gctgcggtgg ccatcgtccc agggttctgg gagggtccta ttcccatcat
                                                                     1740
gcctgcgttc tgtgccatca gccgtgacgt tcgcatgctc tggagggctg cttggcttct
                                                                     1800
tacggctgct atatcctggg gagaacctgc agtgaaaaag aggacacata ccactcactc
                                                                     1860
ttctccataa gcaatatact gcaacaagat gttggaattt tctttgggaa tgacaaaatt
                                                                     1920
cctttatatg aaaggatcta ctctgataat aaatctgtaa caaaaatgat tatttttctg
                                                                     1980
attatagcat atgctgattg cgaaaatttt gaaagtgtta aaaaatacag agacaaaa
                                                                     2038
```

```
<210> 5349
<211> 1009
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (188)...(366)
<223> similar to gi338330 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5349 tttttttttt ttaatagcta attttttgta atgaaattac atgcagatga ttttttaaca 60 ataaaacatg ttactatgta tcagaacaaa catgggtgta aattttttta aatggtgaaa 120 gctataggaa ttgactctag agatacccat atcaggatgt gggtgacctg cctgtctgca 180 tetttgeagg teetggaaca acctgtactg tgtgeteagg aacagtgage taacetteta 240 caaggatgec aagaacetgg ceetggggat geeetaceat ggggaggaac ceetggeeet 300 gagacatgcc atctgtgaga ttgctgccaa ctacaagaag aagaagcacg tctttaagct 360 gaggtgaggc cttcctggcc tttgaaagct cgggttgatg gcttgatttg gcattagtgg 420 cagggcagag gccctctgta ggggaccagt gccaggcctg agctgctcct caggggtttt 480 tcaaatcaaa gaggctgatg gtccagactt tgacctctca gaaagtgctg ggctgcctga gaggggtctg gatgttcggc tcagggtatt gtgggatcag agccagcct ctgcccagcg 600 ccccctccag aggtgtctcc atgacaggaa accctttgtc ctcctaggct gagtaatggc 660 agegagtgge tettecatgg caaggatgag gtaagegegg geageetage ceagacetgg 720 ctaagaaggg ggtaggtgga ggaccccagg ccgcttgccc tggaggcccc ctcagaaggg 780 gcagtcccaa gagcccccac cattgttgcc tggcccggga ggtgggggc tgtgggcctc 840 cagacterar egtgacerte egeccegeag gaggagatge tgteetgget geagggegtg 900 agcaccgcca tcaacgagtc ccagagcatc cgcgtcaagg cgcagagcct gccctgcct 960 teceteteeg geeeegaege eageetegaa ttecaceaeg etggaetag 1009

```
<210> 5350
<211> 1077
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(924)
<223> similar to gi5059425 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5350
ggaattcgct tgctggaaga gaagttgagt tgccaaccga accatcactc gtgtacgaag 60
cagtgtgcaa caggcagaac cggccttcat tggctgagct gccccaagcc gggcctgaga 120
ctcccggctt agaaggactg aaggagctaa tgcagctctg ctggagcagt gagcccaagg 180
acaagaccctc cttccaggaa tgcctaccaa aaactgatga agtcttccag atggtggaga 240
acaatatgaa tgctgctgtc tccacggtaa aggatttcct gtctcagctc aagagcagca 300
```

```
ataggagatt ttetateeea gagteaggee aaggagggae agaaatggat ggetttagga
                                                                      360
gaaccataga aaaccagcac tctcgtaatg atgtcatggt ttctgagtgg ctaaacaaac
                                                                      420
tgaatctaga ggagcctccc agctctgttc ctaaaaaatg cccgagcctt accaagagga
                                                                      480
gcagggcaca agaggagcag gttccacaag cctggacagc aggcacatct tcagattcga
                                                                      540
tggcccaacc tccccagact ccagagacct caactttcag aaaccagatg cccagcccta
                                                                      600
cctcaactgg aacaccaagt cctggacccc gagggaatca gggggctgag agacaaggca
                                                                      660
tgaactggtc ctgcaggacc ccggagccaa atccagtaac agggcgaccg ctcgttaaca
                                                                      720
tatacaactg ctctggggtg caagttggag acaacaacta cttgactatg caacagacaa
                                                                      780
etgeettgee cacatgggge ttggeacett egggeaaggg gaggggettg cageaceee
                                                                      840
caccagtagg ttcgcaagaa ggccctaaag atcctgaagc ctggagcagg ccacagggtt
                                                                      900
ggtataatca tagcgggaaa taaagcacct tccaagcttg cctccaagag ttacgagtta
                                                                      960
aggaagagtg ccacccettg aggeceetga etteetteta tggeagtetg geetgeeeae
                                                                     1020
aaactgactt tgtgacctgt cccccaggag tcaataaaca tgatggaatg ctaaaaa
                                                                     1077
```

```
<210> 5351
<211> 2093
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (678)
<223> similar to gi6002585 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5351
atggctgcgg ccggcggcgg cggcggcggg gcggcggg cgggccgagc ctactcgttc
                                                                       60
aaggtggtgc tgctggggga aggctgcgtg gggaagacgt cgctggtgct gcgctactgc
                                                                      120
gagaacaagt ttaacgacaa gcacatcacc actctgcagg catcattctt aacaaagaag
                                                                      180
ttaaatattg gtgggaaaag agtaaacctt gccatatggg atacggcagg tcaagagaga
                                                                      240
ttccatgcat tgggtccaat ttactacaga gattcaaatg gagcgatttt agtttatgac
                                                                      300
ataacagatg aagattettt teagaaggta aaaaaetggg teaaagaatt aeggaaaatg
                                                                      360
ttgggaaatg aaatctgttt atgtatagtt ggtaataaaa tagacttgga aaaggagaga
                                                                      420
catgitteca ticaagaage agagtegtat geagaatetg tgggageaaa acattateat
                                                                      480
acttcagcca aacagaacaa aggaattgag gaactctttc ttgacctttg taaaaggatg
                                                                      540
atagaaacag cacaagtgga tgagagagca aaaggcaatg gctctagtca gccgggaact
                                                                      600
gcaaggcgag gtgtacagat tattgatgat gaacctcaag cccagaccag tggtggaggg
                                                                      660
tgctgttctt ctggataact gttcacgcct aagaaattaa aagacagaac aaaactgtgg
                                                                      720
atcattgccc tcaacatgaa gactgccata ttccaagtca cattatttta ccaatggaat
                                                                      780
tatagaatta acagtatttt aaattacgtt tataacactg cagagacctt aagtgctaaa
                                                                      840
cttagtggag tttgtgacca gagaattggc attttctaca aatgtttttt tttggttttt
                                                                      900
ttttggtttt ttttgggttt ttttgagacg gagtctcgct ctatcgccca ggctggaatg
                                                                      960
cactggettg atetetgete actgeaaget eegeeteeeg ggtteaegee atteteetge
                                                                     1020
ctcagcctcc cgagtagttg ggactacagg cgcccgccac cacacccagc taatgttttt
                                                                     1080
gtatttttag tagagacggg gtttcaccag gttagccagg atggtctcga tctcctgacc
                                                                     1140
ttgtgatccg cccgcctcgg cctcccaaag tgctgggatt acaggcgtga gccaccgtgc
                                                                     1200 -
ccggcctaca aatgttaaca aagcaattac caatggcctt tttacatatt ttttctttaa
                                                                     1260
tgaggaataa tatgcatgta gaaaagacct acttaaagtc ttcatttata ttctttcaaa
                                                                     1320
tcaaatcttt atttaataac ttatatatgt tgttggaatg gttacatttt tgcagccctt
                                                                     1380
tgtattttgt ggtagtttaa attgtatcac ttctaaacag caaactgttt ttgtttttaa
                                                                     1440
```

```
ttaqcaqata tctgaagtac tatttttgca gggtttgcac aqqcccqtaa ctgtctacta
                                                                     1500
ctttgatata atctgtatac atcctgtatg ctgagctggt aaaatacatt gtaaattaca
                                                                     1560
tattaaatat tttatctgct tttacaagcg caaggtgcaa aaatatatac aatagtctca
                                                                     1620
ttgatgactg taaagtgaat taacatttgg tgattatgcc tagctttttt gactaatata
                                                                     1680
aagatcatag ctccccttca cttctgtctt aacttgaaca tggcgtgttt aaattttcat
                                                                     1740
acatacttta cttgaattat tgctgttgtc acatattttt gcctctgtga gttcatctga
                                                                     1800
tgattgagca gtagcatttg ccttttgggt tttttgtttg ttattataga agagatgact
                                                                     1860
totgotgatt tigotitaga atggitacot tagaagaatt tgggiggoto atgitgaatt
                                                                     1920
tracttrige aatagettte attitetrat aggetttata agagatgggt tragtggtat
                                                                     1980
gagcagagga agagatccca gatagtagcc agttaaccaa gactcattca tatagcacgt
                                                                     2040
agtttatgtt cctgaggcag cacttttaga tcctttgtga gcaagttcta ttt
                                                                     2093
```

```
<210> 5352
<211> 1323
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (78)...(663)
<223> similar to gi531241 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 5352
cagtgtggcg gaattcacag ggctaggggt ccagggtgtg ggtgcagcag acagccaccc
                                                                       60
tggccatatg catctcgttc ccacaggcat tcaccaagga cttcgaggtg agccagctct
                                                                      120
atgactgcaa ctggatcgtg gtcaactgct ccacaccggc caactacttc cacgtgctgc
                                                                      180
geeggeagat cetgetgeee tteegeaage egetgattat etteacacet aaatetetge
                                                                      240
tgaggcaccc agaggccaag tccagctttg accaaatggt atccgggacc agcttccagc
                                                                      300
gggtgattcc tgaagatggg gccgcagcac gggcccctga gcaggtgcag cggctcatct
                                                                      360
tetgeaeggg aaaggtgtae tatgaeetgg tgaaggageg gageageeag gaeetggagg
                                                                      420
agaaagtggc catcacgcgc ctggagcaga tctctccatt ccccttcgac ctgatcaagc
                                                                      480
aggaggcaga gaagtaccca ggtgcggagc tggcctggtg tcaggaggag cacaagaaca
                                                                      540
tgggctacta tgactacatc agcccacgct tcatgaccat cctgaggcgc gcacggccca
                                                                      600
tatggtatgt tggccgggac ccagcggctg caccagccac aggaaacagg aacactcacc
                                                                      660
tggtgtcact gaagaagttt ctggatactg ccttcaatct ccaqqccttt qaqqqcaaqa
                                                                      720
cattttagag ctgggcaaaa cctgtgtagg tctcgctgtg ggtttgctgg ggaccaaggg
                                                                      780
ggtgatgaaa aggggagggg cggagctcct gcccaagaga gggqctqtqq qqccccaqqa
                                                                      840
taaaacagac acagtgacag ggccaagagc cagcactgct ggccttggtg tcatgccaga
                                                                      900
atctaccagg actgagggag ccagaggagt cctgtaggca ggctactgtg ctggagcatc
                                                                      960
ecceagetge teccatettg etggaattte ttgggegget tetecaectg tateteaaga
                                                                     1020
cagacacceg ggggcctgtg tetgtggccg etcecatece ggcagecetg getgetgete
                                                                     1080
gccccaccct cgcttatctg tagattcaaa gcgatgttct cttctgtgct cttagaagta
                                                                     1140
gggagttcag cagtaacagc caggtgaagc gaacctgctg ggtgatttgt ttgcgctctg
                                                                     1200
ttttatgggg cattcctgcg agatgtgtca gcttctgtgt gaaatgcagc cacagctcat
                                                                     1260
gtgtaccaaa gtagaaaacc aaatcacaga gaaataaaaa catgcttcag agagaaaaaa
                                                                     1320
aaa
                                                                     1323
```

```
<210> 5353
<211> 1158
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(483)
<223> similar to gi2853081 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5353
tttggagagg ccttatggta atgtcggcca ttgagaaatt gttgaggcag gtagattggg
                                                                   60
gtcaactgga ctacttagtt gtagacatgc caccaggaac tggagatgtg cagttatcag
                                                                   120
teteacagaa tatteetata acaggtgetg tgattgtete caegeeceag gacategeat
                                                                   180
tgatggatgc acacaagggt gctgagatgt ttcgcagagt ccacgtgccc gtccttggcc
                                                                   240
ttgtccaaaa catgagtgtt ttccagtgtc caaaatgtaa acacaaaact catatttttg
                                                                   300
gtgctgatgg tgcaaggaaa ctagcacaga cccttggtct tgaagttcta gqagacattc
                                                                   360
cettacacet taatataagg gaagetteag atacaggeea gecaattgtg titteacage
                                                                   420
ctgaaagtga tgaggccaaa gcttacttga ggattgctgt ggaagtggta agaagattgc
                                                                   480
catcaccttc agaatgattc cccaagtgtc ctggaaattt gcctggtact gacattaaga
                                                                   540
ggacctttgg aaatcagcaa tgtggtgatg gaacctacag aaataataga aatcataact
                                                                   600
660
ctttgatgta tcaatgttaa ctgctatatt taggaatttt ttgaaagctg gtgtgtacca
                                                                   720
cctgcaaaga actgcatttt attttattga attacccctt tagaaatcat gagtttatga
                                                                   780
tgttacaagt ccattttggg agagaactgt acactttttg caggaccaca gaattagtaa
                                                                  . 840
tttaaatgat atactaaatt tgtgtatggg cataagtatt acgccttccc accaggcaat
                                                                   900
ttggactgtc tttgaatect gtetttggta etgtettgga catqttetta atatqaacet
                                                                   960
etgettette atetggatea caetataece caaaettaat gaattteagt etceaggagt
                                                                  1020
ggagcctgaa catatgtatt tttagtaaga ccatgatgat gttgatgatg attctggtaa
                                                                  1080
tcatggcagt aagaataata gctaacattt aacaagttaa ttataattgt tcttccattt
                                                                  1140
gtgtgagcgg gtactatt
                                                                  1158
```

```
<210> 5354
<211> 795
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(459)
<223> similar to gi825671 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5354

```
cagggccagt gcatattagt ggacagcact tagtagctgt ggaggaagat gcagagtcag
                                                                       60
aagatgaaga ggaggaggat gtgaaactct taagtatatc tggaaagcgg tctgccctg
                                                                      120
gaggtggtag caaggttcca cagaaaaaag taaaacttgc tgctgatgaa gatgatgacg
                                                                      180
                                                                      240
atgatgatga agaggatgat gatgaagatg atgatgatga tgattttgat gatgaggaag
ctgaagaaaa agcgccagtg aagaaatcta tacgagatac tccagccaaa aatgcacaaa
                                                                      300
agtcaaatca gaatggaaaa gactcaaaac catcatcaac accaagatca aaaggacaag
                                                                      360
aatccttcaa gaaacaggaa aaaactccta aaacaccaaa aggacctagt tctgtagaag
                                                                      420
                                                                      480
acattaaagc aaaaatgcaa gcaagtatag aaaaagcgca ttgaacagtc ctgggcacta
catgtaaatt aagcccaaag atggggagaa aggaaaagga gagacaaata tagtccatac
                                                                      540
tgagtgtcat caacaatcca gactgaagtc ttctatttta atctcaatcc ccttttctga
                                                                      600
tttgccacce atgcctcttc aggctggaaa caatctcttg gttccctaaa gcactttctt
                                                                      660
etgactgetg tgatteagtg aacettgeee tttgetttet attacttgtg catttgeete
                                                                      720
acctgacaat gttttaaatc gcctttgtat ctccttagct gctcaataaa tatttgaatg
                                                                      780
catcaattaa aaaag
                                                                      795
```

```
<210> 5355
<211> 1119
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1122)...(963)
<223> similar to gi516012 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5355
tttttttttt ttgtgtgaac aagcettcat tgtgcaagcg tgagcccaac aaacaaacac
                                                                       60
caggiciges etggeegaag acgaagegie etceetggag gigggaacaa gicaectetg
                                                                      120
accacacete etetgaegee ateaceteet eetggeeeea eecaaggget egacacaage
                                                                      180
cccaaggtcg gggggagagg ggcggggcgg aaccgagggc ggaggccaag gtgggattcc
                                                                      240
aggaaggeet teegaaggat ggaggtgggt cetgteeete eaggtagett gtgggtgtgg
                                                                      300
acagcaggac ttgctggctc agtgtgggca caaggacact gtgccactgg ttgagtgagt
                                                                      360
ggtgagggat tggaggtggc tcccagaggc ctccatctgc atggccctgg ccctgtggct
                                                                      420
ccagcagget gecetggetg tgggtagece aggagecaca tgegettagt ggggeegete
                                                                      480
tggggcaggg geteteacag gacagcatga gecaetgage egeetgggga gggecaggee
                                                                      540
aggcggggag ctgtggtgca atttgctcct gtccctggag gtctgtgggc ggaagctgtg
                                                                      600
ggcacaggtg gacatggctg tcagacgtgg ggtcataggc tcccactccc cagctcctgc
                                                                      660
ctcctcacag acagaagcca cggccaagga gaggagagac atggggaagg cagagatgag
                                                                      720
ggaacaggaa gggagaaggc aatgaggaaa gagaaaggga gggtaagatg cggagggcac
                                                                      780
aggtggatgg ggacgagggg gccaagcatg gacagcggga ggggagaagg cggaggggcc
                                                                      840
gagaggcagc tgcgcaagag ggccttcagg cagagttgag gtctgtggcc ttgggctggg
                                                                      900
ccttgcggga ggtcagctcc gacagcttct tcagccgctt cttcagctcc agcgggaact
                                                                      960
tetegtagea cetettaeae aegggettea tgtegaaete cacaaaettg ttetteaggg
                                                                     1020
tgagcttgct gttgcaggtg gagcaggaga agcagctcac acaccaggcc ttgttgaggg
                                                                     1080
ccgacaccac atcgccttca atcacatggc tgcagttgt
                                                                     1119
```

```
<210> 5356
<211> 1376
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7)...(534)
<223> similar to gi1403547 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5356
tttcgtctgc tcggcgtcgt ggccttcagc acgttaatgc tcaaacgctt cagagaacca
                                                                       60
aagcatgaaa gacgtccgtg gaggatatgg tttttagaca cttccaaaca agccatagga
                                                                      120
atgctgttca tccactttgc aaatgtatac ctagcagatc tcactgaaga ggacccttgt
                                                                      180
teactgtace teateaactt ceteetggae gecaetgtgg geatgetget catetaegtg
                                                                      240
ggggtgcgcg ccgtcagcgt cctggtagag tggcagcagt gggagtccct gcgcttcggc
                                                                      300
gaatatggag accetetgea gtgtggagee tgggteggge agtgegetet ttacategtg
                                                                      360
atcatgattt ttgaaaagtc tgtcgtcttc atcgtcctcc taatacttca gtggaaaaag
                                                                      420
gtggccctgt tgaatcccat tgaaaaccca gacttgaagc tggccatcgt catgctgatc
                                                                      480
gtccccttct ttgtcaacgc tttgatgttt tgggtagtgg acaatttcct catgagaaag
                                                                      540
gggaagacga aagctaagct agaagaaagg ggagccaacc aggactcgag gaatgggagc
                                                                      600
aaggtccgct accggagggc cgcatcccac gaggagtctg agtctgagat cctgatctca.
                                                                      660
gcggatgatg agatggagga gtccgacgtg gaggaggacc tccgcagact gaccccctc
                                                                      720
aageetgtga agaaaaagaa geacegettt gggetaceeg tatgacacat teccatqetq
                                                                      780
ggggtgacgg gagggccccg ccaaccgctg gtgtgcagag gtcatcccgc agcatcgttc
                                                                      840
cttaccetet etetgecett cetttetace tetgeteete ttgetgtete tgecegetet
                                                                      900
cgcctgcccc cagactactg tgacttaaaa agagggaaga ggagccagcg cccgaggggg
                                                                      960
ccactggcgg ctggaggtcc ccattcagtt gcactacaaa cactgaccaa atatgcaagg
                                                                     1020
aaggagetgt gtttgtttgt tgtegteeca gaeagtgttg tgagggaeet gaggeeetge
                                                                     1080
cccgtgtccg accaccgagt ggcaaggtgg aaggaagcac aggcacacag accgtgggtg
                                                                     1140
ggteteetea eegtggetgt gggeagtgeg aacacataac acceteggge taaaagtgae
                                                                     1200
tegttgacea agttggaace ggaatgettt ettacteaaa atggettttg taactattga
                                                                     1260
tttctgaagc tggttttatg agttgtgaca gtgttaccag gttgggggta tgtgtttatt
                                                                     1320
tectacaaag taettaeggg actaatggge aaaacagaga tttttaagte tteegt
                                                                     1376
```

```
<210> 5357
<211> 957
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (959)...(383)
<223> similar to gill36412 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5357
ctgccagtga agcccaggct gctttttcag actgtgtgta gcaccaagaa cgcttccttc
                                                                       60
                                                                      120
acacgatett caggategag egggetgaet gggagtgtet geeteagtee caegtggeae
                                                                      180
ttqqaaaaaa cagagcgagg ccccccaag aggcagcgcc cacccggccg ccgtgctccc
ccaacttggg gacgtctggc cttggacagc tgggcccgtc tctcaccacc cacctcagag
                                                                      240
gcaaaaaagg attcacaccc agatctctag aaaaatgatc aaaagcaggt ttcttctcac
                                                                      300
agecaagett cetggacatg geagtteatt acateteggg aaaaegtaaa teatttette
                                                                      360
agetgteaat actgtgteec teacateett gageetegtt ettgeaaaat ettggeette
                                                                      420
tegetggget egetggeegt acegtaeggg gtgttgtgea geteettgga caccacacag
                                                                      480
aggaactegg cttggtette gtteccatag ttgtaagagg ageegatget gaeeaactge
                                                                      540
tegaaettee ageegtegga catggtggae accatetgeg tgageteete eteetggeae
                                                                      600
tgcagcacac ggtacacatg cttcacagge acctgcgatg ttttgctgtc tcgttctcta
                                                                      660
attitigteet tiacaagitti tattaatgag gigatatigt aaaattetge ticeteeaac
                                                                      720
actecttect eegegaggte tttgttaate accagettge egtgteteag gtagtteage
                                                                      780
                                                                      840
acaggcccaa agtaggtggg gtctctgtcg attaaatagg cgcctgttic atccttgtct
gagtccaggt cgggatcggc ctggcataag cggtacagga aggatttcgg gtcccggcac
                                                                      900
agggtetgee gagtggtgäg gaagtaggtg cegeegaegt tgagteggae ceaettg
                                                                      957
```

```
<210> 5358
<211> 520
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(521)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2)...(96)
<223> similar to gi5912261 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5358
ctcagagtgt aagggcaaac aatatgtcaa aaggacatgg tataaaaaat ttgtaggagt
                                                                       60
gcagctgtgc aactetetea gatacaagat tttetgtgag ggagtegetg getatgagte
                                                                      120
attaaatatg catgataata tttttgaaac gatgagttat caagacactc attaaattgt
                                                                      180
ataactaatt ttttagtata tatcctttgc agttaaccag tgattattat atatcaatat
                                                                      240
tgccctactt ttgtggaaga ttttaggatc cttttgtgtg ttggtcatta tctctattaa
                                                                      300
aagggaaagt ccaaaaatct aggtttttgg aatctttatt tttagaaggt aacttttaaa
                                                                      360
tttttatttg aaatgtacaa gtggctcttt gccacatata acttaccttt tcaaattaaa
                                                                      420
aatacgtatt ttattttat ttcctggacc caacaaacag atgacangta tgggagtgtg
                                                                      480
aaggtgaaga gtaaccacta taaactgact tgaagaggcg
                                                                      520
```

```
<210> 5359
<211> 1541
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1039)...(530)
<223> similar to gil204166 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 5359
ttttttttt ttcacggtgc cttcaagctt tattgccaca cacactcccc cagcccttcc
                                                                       60
tgaatggccc tgtgcatggg aacaccagct tagagaagca attcagggct aggcaagggc
                                                                      120
cagaggactg gatttgggac tggggtgggt aggggggatc tggagaagga aagtgctaag
                                                                      180
accaaagccc accccaccc caggtttccc tgagtggtgt ccacccccag ggtcttgggg
                                                                      240
getggettgt geattggggg gagggggete atcccaaatg gatcctcccc tggggtctcc
                                                                      300
aggeteatgg agggaagaga ageceeactg ageceetege acceeeatg aageceteaa
                                                                      360
tgtgcaggga gcaggaagaa gagctgcaca caaacgcata cacatgcttg tctccaagag
                                                                      420
ageteetgge ceetgggget geecageeag gggeteaaca gteeagaeeg atggaeaega
                                                                      480
geaggteete gagtgeeege agaegetget gegeeteete tatggegetg taggtetgea
                                                                      540
ccgtgctggc cacgtggaag cggatgtcgt ccaccagegg gatagagtcc gtctcctgcc
                                                                      600
gggetgecae ageegetgee tecteettea eegeeteeae gaagteetee egeteeaeea
                                                                      660
getteteaat gacettggee atgtaeteag tgeaetggte eteaageege geeaggegga
                                                                      720
agagettgge caegegeeae acaeeeaeea cagtgteete gtetageate tgageeagge
                                                                      780
tgcggccgca cagcctcttc aggcctggca gcaggtacat gtcggcgacg ctcagcacat
                                                                      840
cataggetge etegggggae ageteagtgt ggtegetgta catqtaqtaq aqeaeqtqaq
                                                                      900
tgaagacgtc gggtgagatg ccatgcaggg tgacggctgg ggggccccct gaggtcgctg
                                                                      960
geteeteget eteteggaag tggteateea geagggeteg gaagtagtea etgeggeeae
                                                                     1020
agaaaaaggo ottgtggcag aggaagotgo agocagocao toggaagcag atgtcagggo
                                                                     1080
agctgttgaa gccgtcagga caagggaagg gcagctccca aagatcacct cggagctcgg
                                                                     1140
ggggcagggc acaatcggcc agcagcgcca tgtcctcccg gaggcggggg tctgcaggtg
                                                                     1200
ggggctcgat ggtcagcacc ttcacacacg tgcctggctt agacgccaca aactcagaca (
                                                                     1260
ccttctcgca cttggcctcc aggtcgctga gcaggtccca cagctggcat tgcttggcca
                                                                     1320
ggcgctcaca gtcactcaca tgctctacgc caatgtccag gcggcctggg ggcagtgggg
                                                                     1380
aggatgaggg cctgcgggac ctcagctgtc atcaggccca cagaaaaagg gtgatcccct
                                                                     1440
eccacetgge cacetggetg caggactagg acteetggge ceaettgeca ceatggttte
                                                                     1500
cccatcaaaa gctgttcgga cgcgtgggtc gacccggaag t 🤲 🔻
                                                                     1541
```

```
<210> 5360
<211> 904
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (900)...(770)
<223> similar to gi2707600 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5360
tccggaattc ccgggtcgag cctgcatccg agtagcggtt ctcgaagcag ctggggcatt
                                                                       60
aggggettee eccaggeagg geatategte eccegeceag aggeeeggeg eagteetgge
                                                                      120
aacagaagtg gttctcatgc cagcgctgtc cctccgcctc ggtgcagcgc caggagaaga
                                                                      180
tcagctggga gagggagagg gagaggggaa cgcttcattc attcattccc tcattcattc
                                                                      240
                                                                      300
atccagtaac cacgcetttt acccagttaa cgctaaagca cgtctgcaca cattcccatt
taattcactc agccactttt ggacgcaggg aggactgatt ggcttaacca ggatcccagc
                                                                      360
tagcaagtgg gacaatcccc agtgcgacct gggggtctgg actcccaacc cagggctcca
                                                                      420
ggetteettt tatgetgaca teaagggaat ttetageatg atgaggeaca geactgggea
                                                                      480
                                                                      540
ctoggoatot actgagatga goatgtgtoc aagactooot gototataga aattogatga
gtccaggaac atttgaggga ctctgcagtg ggggaggcca gagagaaggg cactgggtcc
                                                                      600
tacatgeeca gageteaagt cagaacacag ggaacttggt agteecagge tggtteetae
                                                                      660
                                                                      720
ttctccccac tccctgatac tgggagaaac tgtggcccag gagagtgtcc ctttgtatcc
tgccactetg gactetggge agacceccag tteeteeeet ecaggetgta cetggtcaca
                                                                      780
ageogggeag egegggegea geaactetge atgatgaegg eegeagtaga gttgteeate
                                                                      840
atggtagaag tagatgaggt ttatcagggc ctggccacag gcctggcagg caaagcaagg
                                                                      900
                                                                      904
```

```
<210> 5361
<211> 988
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20)...(279)
<223> similar to gi3688089 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5361
cgcctcacct tccctaccac cagccggggc cattgacacc cgggacacag ggtcctctga
                                                                       60
geeteageea eeaceggage egeeteggte agggeeacea etgeeeaaeg geetgaagee
                                                                      120
egagttegee etggeactge eccetgagee geceeegggg eetgaggtea aggggggeag
                                                                      180
ctgcggcctg gagcacgaac tgagctgctc caagaacgag aaggagctcg aggagctgct
                                                                      240
totggaagco agtoaggaat cogggoagga gacactgtga cactttagtt cocttttcc
                                                                      300
ggtcggtctg cgatgagctg aggccagagc catgagaatc tgctcacctt cccccagcc
                                                                      360
tteetgagge ceaggatgee aggggtgggg gecattetgg ggeceeete ceeceacage
                                                                      420
aacactacaa ggggtgcagg agctacaggg agtggccctc cgcgcgtgac tcaagcactt
                                                                      480
ctatttatga gcccagcact ggaagactct gggggtgaat gggaggaggg ggagcaggag
                                                                      540
gaggaggagg tetecaagga cateaggege etgttetgga ggggeeagge ttgeeetgeg
                                                                      600
gagggcaggc gtcctgggtg gtggtgggat ggtcccctgt ggccccgggc acagggccgg
                                                                      660
gcaggcagcc tggtgccgga gaggcggtgc gtgctggtgg tggttgagat gcgcagaaca
                                                                      720
gececagaea gegeaggeeg ggeagggtgg ggggatggga geagaggate agagetttet
                                                                      780
ttttctcaag tgcaataaat ctatcaggga gctggggcgg gagcagccgg cactccggga
                                                                      840
ccctgctgtc caggccactg gaggctgcgc cctgagaggc actacagccc tttgggggcg
                                                                      900
agtggcatgg gtgtgggtga gggtgggcag agggctgggg ctactcctgt cggtgcaact
                                                                      960
ctgttcacac cttttctaat aaactggg
                                                                      988
```

```
<210> 5362
<211> 1496
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1272)
<223> similar to gi5453423 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5362
atgtgtgtgg gaaagccttc agtcagagct cagatcttat tctgcatcag agaatccata
                                                                       60
ctggggagaa accatatcca tgtaatcagt gtagcaaaag tttcagtcag aattcagacc
                                                                      120
ttattaaaca tcgaaggatc cacactggag agaaacccta taaatgtaat gagtgtggga
                                                                      180
aagettttaa teagagetea gteettattt tacateagag gatteataet ggagagaaae
                                                                      240
cctatccctg tgatcaatgt agcaaaacct tcagtaggct ttcagatctt attaatcatc
                                                                      300
aacgaattca cactggagag aagcettace catgtaatca gtgcaataaa atgtttagte
                                                                      360
gaagatgaga tettgttaaa catcacagaa tteatacagg tgagaaacce tatgaatgtg
                                                                      420
atgaatgtgg gaaaaccttt agtcagagct ccaaccttat tcttcatcag agaatccaca
                                                                      480
ctggagagaa accttatgca tgtagtgatt gtactaaaag ctttagtcgc cgttcagatc
                                                                      540
ttgttaagca tcaaagaata cacactggag agaaaccata tqcatqtaat caqtqtqata
                                                                      600
aaagttttag tcaaagctca gacctcacta aacatcagag agtacactct ggtgaaaagc
                                                                      660
cttatcattg caatagttgt gagaaagcct tcagtcagag ttctgacctt attcttcatc
                                                                      720
agagaattoa cactggagaa aaactattat ctgtgcacac agtgcagcaa aagtttcagt
                                                                      780
cagateteag aceteattaa acaceagaga atecacaetg gggaaaaace atataaatge
                                                                      840
agtgagtgca ggaaggcttt cagtcagtgc tcagctctta ccctacacca gagaatccac
                                                                      900
actgggaaga aaccaaatcc atgtgatgag tgtggcaaaa gctttagtcg gcgttctgat
                                                                      960
ctcattaacc atcaaaaaat acacatggt gaaaagccgt ataagtgtga tgcatgtggg
                                                                     1020
aaagccttca gcacatgtac tgatcttatt gaacaccaga aaacccatgc tgaggagaaa
                                                                     1080
ccctaccagt gtgttcagtg cagcagaagt tgtagccaac tctctgaact tactattcat
                                                                     1140
gaggaagtee attgtggaga agacagteaa aatgtgatga atgtgagaaa acctttagtg
                                                                     1200
tgtacaccaa ctctattcag taccagagac actgtaccag aaaaaaatct aatgaatgct
                                                                     1260
gttgattatt gatgagtatg aaaaaggttt taatcagtgt tcaactctta tgctacatta
                                                                     1320
aaaccacact ggatceggat acgtgtggtg gctcacqcct qtaatcccaa cactttggga
                                                                     1380
ggcagatgtg gaagcatcat ttgagcccag gagtttgagg ctgcagtgag ctatgattcc
                                                                     1440
accattgcac tocagtotgg gcaacagage aagaccotgt ctatttaaaa aaaaaa
                                                                     1496
```

```
<210> 5363
<211> 1160
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (1159)...(740) <223> similar to gi4150892 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5363
gctgcgcgga cgtctttatt tttccccggg tggggagcag gatacacagc ccacactgca
                                                                       60
gtcacttagc ttgtaaaaat atctcaataa ataaaacaaa caagcaacat atacactgaa
                                                                      120
cagagaatat tttttttaaa atggctagcc aagcaatcac ggagaaagga aaagaatagc
                                                                      180
ggcgtgaaag taagaattcc aggctgactt gaaacaatca tgcagaggct cgggggaggg
                                                                      240
gaaggaactc gggggtcctc ttctgagagc cttggtccag tttcaacaga attgtacaag
                                                                      300
aatgcatttc tgttttatta aaaaaataga cattaaaaaa ggcacttaga gggaaataca
                                                                      360
aattcaaaat ccaaatcctc ataaatgtgt tcctggaatc tagacatttt cagaaagaat
                                                                      420
aaacctcccc ccaaacataa gacccagaag aaaaatccaa acagaaacaa gatgaccgat
                                                                      480
gacaatgtca ccagcaagag ggctgggagt gcccttccta tgtggggacc gtcctggggg
                                                                      540
aggacgggag cccgggtctt ctgtccgatg tcactgcttg tcccttctct cqacqctqqt
                                                                      600
ggagggcaga ggtgggggcc tcctgaggtt gttccaggtt tccagaagtt acagactcga
                                                                      660
atgcatecca attecaettg egeegeegae gegaeggaea geeetggege geeggteegg
                                                                      720
ggtgggtggc gcggcgctag tgggaggcgg acatggacca cgcgccctcc atgcgccaca
                                                                      780
cggagaaggc gtagctgagg cgctcgtggg ccacgtagct gcagctggtc atcttattgt
                                                                      840
ccatctcgtc gctctgcagg acctggtaga ggaagtctat gtacctggcg gccagcttga
                                                                      900
gegtetggat ettgeteage ttgteagagg geagegtggg gatgatettg egeagegeeg
                                                                      960
cgaaggcete gttgagegae tgggtgeget ggegetegeg caegttggee aggatgeget
                                                                     1020
ggctctgcag ctcctcgaag gactgcgcgc tggggctgcc cttcttgccg cgcttgcccg
                                                                     1080
gggtcgggct gccatcttcg ctcgacttct tgctgtagcg ccgcttccgg ccgaagcgct
                                                                     1140
tgggctgcct ctcgacccgg
                                                                     1160
```

```
<210> 5364
<211> 6277
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(6278)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (290)...(5310)
<223> similar to gi1200235 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5364

gggtcgaccc acgcgtccgc ccacgcgtcc gtgttctttc tgagagggga ctttcggctc 60
ctcagtgtct gggatgcaaa caggttgcgg agggtgggat gacagcctga acccaggttg 120
cgggggtccc ctgtgtgcag ggaggctggt caccctgccc tctgcagcct ttctggcctg 180
ggcctctgtg atcatccagg cgggaggggg atgcagaggg aagctggcgg tggcccgtga 240
```

```
tgttggcaca gggcctcacc ggatgctgtc tcctccccct gctccccagg tgtaccagga
                                                                      300
tgagtttgtg tcctcccaga tcaagatccc ctcagacacg ctgtccttgt accetgcett
                                                                      360
tgacatetae tacatetaeg gettegteag egecteette gtgtaettee tgaegetgea
                                                                      420
gctggacacc cagcagacgc tgttggacac agcgggcgag aaatttttca cgtccaagat
                                                                      480
cgtgcgcatg tgcgcgggag actcagagtt ctactcatac gtggaattcc ccatcggctg
                                                                      540
ctectggege ggegtggagt accgettggt geagagegee cacetggeea ageetggeet
                                                                      600
getgetggee caggeeetgg gegtgeegge tgatgaggae gteetettea ecatettete
                                                                      660
teagggeeag aagaaceggg ceageeeace eeggeagace atectetgee tetteaceet
                                                                      720
cagcaacatc aatgeccaca teeggegeeg catecagtee tgetategtg gggagggcae
                                                                      780
                                                                      840
tetggetetg ceetggetge tgaacaagga getgeeetge atcaacacce ceatneagat
                                                                      900
caacggcaac ttctgtgggc tggtgttgaa ccagcctctg ggaggcctgc atgtgatcga
                                                                      960
ggggetgece etgetggeeg acageacega eggeatggee agegtggeeg ectacaceta
ccgccagcac tctgtggtct tcattggcac gcgcagcggc agcttgaaga aggtgcgggt
                                                                     1020
                                                                     1080
cgatggcttc caggatgccc acctgtatga gacagtcccc gtggtggatg gcagccccat
cctccgagac ctgctcttca gcccggacca ccggcacatc tatctcctga gtgagaagca
                                                                     1140
ggtgagccag ctcccggtgg agacctgtga gcagtaccag agctgcgcag cctgcctggg
                                                                     1200
ctccggggac ccgcactgtg gttggtgtgt gctgcgacac aggtgctgcc gcgaaggggc
                                                                     1260
ctgtctgggc.gcctctgccc cacacggctt tgctgaggag ctgagcaagt gtgtccaggt
                                                                     1320
gegggtcegg cecaacaatg tgtcagtgac gtcacctggg gtgcagctga cegtcaccet
                                                                     1380
gcacaacgtg ccagacctca gtgcgggcgt gagctgcgcc ttcgaggcgg cggcggagaa
                                                                     1440
cgaggcggtc ctgctgccct ccggtgaact gctctgcccc tcaccctccc tccaggagct
                                                                     1500
                                                                     1560
cegagetett accaggggge atggggecae cegeaetgtg eggetgeage tteteteeaa
ggagacagge gtgaggtttg ceggtgetga etttgtette tacaactgea gegteeteea
                                                                     1620
gtcgtgcatg tcctgtgttg gcagccctta cccctgccac tggtgtaagt accgccacac
                                                                     1680
gtgtaccagc cgcccccacg agtgctcctt ccaggagggc agggtccaca gccctgaggg
                                                                     1740
etgecetgag atcetgecca gtggggacet cetgatecce gttggggtea tgeageetet
                                                                     1800
taccttgcgg gctaagaacc tacctcagcc gcagtcgggc cagaagaact atgagtgcgt
                                                                     1860
ggtgcgggtg caggggcggc agcagcgggt gcctgccgtg cgcttcaaca gcagcagtgt
                                                                     1920
gcagtgccag aacgcctcgt actcctatga aggtgatgag catggtgaca ccgagctgga
                                                                     1980
cttctccgtg gtctgggatg gagacttccc catagacaag cctcccagct tccgagccct
                                                                     2040
cetgtacaag tgetgggege ageggeeeag etgtggeete tgeeteaagg etgateeeeg
                                                                     2100
cttcaactgt ggctggtgca tctcagagca caggtgccag ctgcggadcc actgcccggc
                                                                     2160
cccgaagacc aactggatgc acctgagcca gaagggcacc cggtgcagcc acccccgcat
                                                                     2220
cacgcagatc caccctctcg tggggcccaa ggaaggaggc acccgggtca ccatcgtggg
                                                                     2280
tgacaacctg ggcctcttgt cccgagaggt gggcctgcgg gtggctggcg tgcgttgcaa
                                                                     2340
ctccattccg gccgagtaca tcagtgctga gaggatcgtg tgtgagatgg aggagtcgct
                                                                     2400
ggtgcccage cegeeggegg ggcccgtgga getgtgtgtg ggtgaetgtt cageegaett
                                                                     2460
ccgcacgcag tcggagcagg tctacagctt tgtgacccca acgtttgacc aagtgagtcc
                                                                     2520
cageegtgge eeggegteeg ggggeacaeg gettaceate teaggeaget etetggatge
                                                                     2580
tggcagcagg gtcacagtga ctgtaaggga cagcgagtgc cagtttgtaa ggagagatgc
                                                                     2640
caaggegate gtgtgcatet caeetetete caeeetggge eecagecagg eececateae
                                                                     2700
acttgecatt gaccgggeta acatetecag cecegggete atetacacet acaeteagga
                                                                     2760
ecceacegic accepecity agreeacety gageateate aatggaagea etgecateae
                                                                     2820
tgtgagtggg acccacctgc tgacggtcca ggagccccgg gtccgtgcca agtaccgcgg
                                                                     2880
cattgagacc accaatacat gccaagtgat caacgacact gccatgctgt gtaaggcccc
                                                                     2940
eggeatettt ettgggegge eccageeteg ggegeaagge gageaceetg atgagtttgg
                                                                     3000
ettectgetg gaccaegtge aaacggeeeg etceetcaae egeteeteet ttacctaeta
                                                                     3060
ecctgatece agetttgage egetggggee etetggegtg etggaegtea aacegggete
                                                                     3120
ccacgtggtg ctgaagggca agaacctgat tcccgcggca gccggcagct cccgcctcaa
                                                                     3180
ctacactgtg ctgataggag gccagccgtg ttcgctcact gtctcggaca cacaactcct
                                                                     3240
gtgcgactca cccagccaga ctggccggca gcctgtcatg gtgctggtgg gtggcctgga
                                                                     3300
gttctggctg ggcaccctgc acatctcggc agagcgggcg ctgaccctac cggccatgat
                                                                     3360
ggggctggcg gcgggggtg ggctcctgct gctggccatc acagccgtgc tggtggcgta
                                                                     3420
caagegeaag acteaggaeg eggaeegtae ceteaagegt etgeagetge agategaeaa
                                                                     3480
cctggagtcc cgtgtggccc tggagtgcaa ggaagctttt gcagagctgc agacggacat
                                                                     3540
caatgagetg actaaccaca tggacgaggt geagateece tteetggaet aceggaetta
                                                                     3600
cgccgtgcgc gtgctcttcc cgggcatcga ggcccacccg gtgctcaagg agctggatac
                                                                     3660
```

```
gccacccaac gtggagaagg ccctgcgcct cttcgggcag ctgctgcaca gccgcgcgtt
                                                                     3720
cgtgcttacc ttcatccaca cgctggaggc ccagagcagc ttctccatgc gcgaccgcgg
                                                                     3780
caccgtggcc tcgctcacca tggtggccct gcagagccgg ctcgactatg ccacggggct
                                                                     3840
gctcaagcaa ctgctggccg acctcatcga gaagaacctc gagagcaaga accacccaa
                                                                     3900
                                                                     3960
gctgctgcta cgcaggacag agtcagtggc tgagaagatg cttaccaact ggttcacgtt
                                                                     4020
cctgctgcat aagtttctga aggagtgtgc tggggagcct ctcttcctgc tttactgtgc
catcaagcag cagatggaga agggccccat tgatgccatc acgggcgagg cacgatactc
                                                                     4080
                                                                     4140
cctgagcgag gacaagctca tccgtcagca gatcgactac aagacactga cccttcactg
cgtgtgtccg gagaacgagg gcagcgccca ggtcccagtg aaggttctca actgtgacag
                                                                     4200
catcacccag gccaaagata agctgctgga cactgtgtac aagggcattc cgtactccca
                                                                     4260
gegteceaaa getgaggaca tggacetgga gtggegecag ggeegeatga etegeateat
                                                                     4320
                                                                     4380
cctccaggat gaggatgtca ccaccaagat cgagtgtgac tggaagaggc tcaactcact
                                                                     4440
ggcccactac caggtgacag acggttcctt ggtggcattg gtgcccaaac aagtgtctgc
ctataacatg gccaactcct tcaccttcac cogctccctc agccgctacg agagcttgct
                                                                     4500
eegcaeggee ageageeetg atageeteeg etcaegggea eecatgatta egeetgaeea
                                                                     4560
ggagacaggc accaaattgt ggcacctggt gaaaaaccac gaccatgccg accatcgcga
                                                                     4620
gggggaccgt ggcagcaaga tggtctccga gatctacctg acacggctgc tggccaccaa
                                                                     4680
                                                                     4740
gggcacactg cagaagttcg tggatgacct ctttgagaca gtgttcagca cagcccaccg
                                                                     4800
gggeteggee etgeecetgg ceatcaagta catgttegae tteetggatg ageaggegga
ccagcgccag atcagcgacc ccgatgtgcg ccacacctgg aagagcaact gcctgccgct
                                                                     4860
gegettetgg gtgaatgtga teaagaaeee geagttegtg ttegaeatee aeaagaaeag
                                                                     4920
catcacggat gcctgcctgt cggtggtagc ccagaccttc atggactcct gctctacatc
                                                                     4980
cgagcaccgc ctggggaagg actcgcctc caacaaactg ctctacgcca aggacatccc
                                                                     5040
caactacaag agctgggtgg agaggtatta tcgagacatt gcaaagatgg catccatcag
                                                                     5100
cgaccaggac atggatgcct acctggtgga gcagtcccgć ctccacgcca gcgacttcag
                                                                     5160
egtectgagt gegeteaacg agetgtattt etatgteace aagtacegee aggagattet
                                                                     5220
cacggetetg gaccgagatg cetettgteg gaageataag ttgeggeaga aactggaaca
                                                                     5280
gatcatcage etegtgteca gegacageta aggtggtgga ateggtgagg agggggette
                                                                     5340
tragtrottyt geogteetee cateragggg agtggetgge teaageetgg gteeceggge
                                                                     5400
tgagccctgg attgggtatc gtggggcagg tcaccctggc cacgatgccc ccggcacacc
                                                                     5460
caggeceect teattagtge ettgetttgg geeetgeagg gggaggggtg acagggegag
                                                                     5520
ecceacece ageageagea atacececae ectectgeee tgtgeecagg tgttgggaea
                                                                     5580
gteccaccet ccctgctatt tatatecete tgcctattta ttgaategaa ettegeetet
                                                                     5640
gtotocatot gtaaatatgt gtococccac oggatgtogo caccotcact cacctgooto
                                                                     5700
ttettgaget gteetgggee etgeeaceeg tetgggetee tttgtgtage attateagee
                                                                     5760
teggtetgge etetggeace teaccettge catggetgae eccaeceatt ecaaggeggg
                                                                     5820
gtcacggtac cagcagcact tggggtgagg cctccaaagc ttcctcagaa ttgtggctgt
                                                                     5880
gccacgctgg accacagggt cccctcaag catctcgggg ccctattctc tctgagcacc
                                                                     5940
tggagggetg gactcagget tgtgccaggg cctgacttgg gcctgggggc cctagaacac
                                                                     6000
tectectest gagestasty ccaaacytes teagtyttyt etycacetye tecgaetest
                                                                     6060
teageegeee catteagege eegeteegte cagtgeeege eetgtgggge caaggeggee
                                                                     6120
gtgccttact actctgtgtc ttctgcctcc tctgaggaat ctggccctgt ctgacagtcc
                                                                     6180
dagaccccc gttctctcct ctttagttgc atgagttttt ctttgttcat ggaatgtttt 1
                                                                     6240
ttcctgatta aatgttgggg aaatgccaaa aaaaaaa
                                                                     6277
```

```
<210> 5365
<211> 566
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (9)...(455)

<223> similar to gil310709 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5365 egeceeega geacecette tttgtatatg geeagggttg gteetettge agecetggge 60 ggacgacaca actettetet etgecetgee ateggttaca ggtgggagat gtetgeatet 120 ctatcagttt acagagettg aacagtaact cagtttetca ggeeggetgt geteecteaa 180 gccagctggg tcccccccga gaaaggcctg agaggacggt cttgggatcc agagagctat 240 gtgacagtga ggggaagagc cagceggcag gagagggctc cegtgtggta gagcettecc 300 agettgagte eggtgeteag geetgetgge cageecegag ettecaaaga tacaqeatge 360 aaggggagga ggcacgggct gcgctgctcc gtccctcttt cattccacag gaggtaaagc 420 tgtccattga agggcgctcc aatgcgggaa aatgaacctc ttccccagac caggactggg 480 getttacece agageetege etegeegeeg tgageaggea gaggatttge acaegeeega 540 gcaaggaatg ggctttctgg cagtgg 566

<210> 5366

<211> 902

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (5)...(739)

<223> similar to gi908805 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5366 tggtctgtac tatggggaga ctgctcagat ccagtcccac atcagcgaca cgtccatcat 60 cetytecaty gacaacaace ggaacetyga cetygacage atcattycty aggtecytyc 120 ccagtatgag gagatcgccc ggaagagcaa ggccgaggcc gaggccctgt accagaccaa 180 gttccaggag ctgcagctag cagccggccg gcatggggat gacctgaaac acaccaaaaa 240 tgagatetea gagetgaeee gteteateea aagaetgege teggagattg agagtgtgaa 300 gaagcagtgt gccaacctgg agacggccat cgctgacgcc gagcagcggg gggactgtgc 360 cctcaaggat gccagggcca agctggatga gctggagggc gccctgcagc aggccaagga 420 ggagctggca cggatgctgc gcgagtacca agagcttttg agcgtcaagc tggccctgga 480 tgtggagatc gccacctacc gcaagctgct ggagggcgag gagtgcagga tgtccggaga 540 atataccaac teegtgagea titteggteat caacagetee atggeeggga tggeaggeae 600 aggggctggc tttggattca gcaatgctgg cacctacggc tactggccca gctctgtcag 660 cgggggctac agcatgctgc ctgggggctg tgtcactggc agtgggaact gtagccccg 720 tggggaagee aggaceagge tggggagtge aagtgaatte agggaeteee agggaaagae 780 cttageteta ageteaceca ecaaaaaaac catgagataa aagtgeaaca cageecattt 840 cccagtagtc tgccttgccc tggcagactg ctccggactc ttctaggaaa ttcctctgtc 900 902

```
<210> 5367
<211> 1762
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1763)...(538)
<223> similar to gi34073 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5367
ttttttttt ttgaatgaca aaagcatttt attgaagatt cacctgcaga tggataagag
                                                                     60
ggaatgagag gagtagaatg ggacactaag tggttctcat cctaagcttg cagggccaag
                                                                    120
tgctgccggg tgttggagaa gtagttttgg ttctgatgta aatggataat accaggatct
                                                                    180
agtggggaga tggcattgga ctgggaaggg acatatgtga ccccaataat ttctggagat
                                                                    240
gacactectg gteattttet tetetgeeca tgggaggtga gaggteaget gacateette
                                                                    300
ccattccagg tgggtcacca ggcccaaatc aagaagtagc taccaaactc caagaggcag
                                                                    360
agtecetgte ceageacaga agateateet ggggeagaga gageecatgg gatagtggag
                                                                    420
480
agacaccagt gctgggccca gctggacaca gtgagctgca gggacctcgt ctcctctatc
                                                                    540
gtetettgtt cagggtggtg gtagagatga tettgetget ggaactgeca gagacactge
                                                                    600
caccaaaccc aaagccactt ccagagccgg agccaaagcc actactcagg ccaaacccgg
                                                                    660
agcccattcc taatcctccg ctgatgcctc cagtgctggt gctaccgctg accacagaga
                                                                    720
tgetcaegge actetggeat tetecagaea ttetgtaete etegeeetee ageagtttge
                                                                    780
ggtaggtggc gatctcgatg tccaaggcca gcttcacact catgagctcc tggtactcac
                                                                    840
geageatteg tgecagetee teettggeet getgeaggge ageeteeage tetacgeget
                                                                    900
tgctgtgggc atctttaagg gcattctcac ctcgctgctc tgcatcagcc acggatacct
                                                                    960
gaagagtetg geactgette ttgatgttet egatetetge eegcageete tggateatee
                                                                   1020
tgttgagete tgeaatttea etettggtgt tetteaggtt gteaceatgt tggteaaceg
                                                                   1080
agatetggag etgetggace ttggtetggt acagggette agecteagee ttgeteetet
                                                                  1140
gggcaatete etegtaetgg geaeggaeet eggeaátaat getgteeagg teeaggttge
                                                                  1200
ggttgttgtc catggaaagg accacggacg tgtcgctgac atgggtctgc atctgggaca
                                                                  1260
gctccgcatc atagaggacc ttcaggaagt tgatctcgtc attaagactg tccaccttgg
                                                                  1320
cctccaactc caccttgttc aggtaggcag catccacgtc cttctttagg accacaaagt
                                                                  1380
cattetegge tgetgtgegt ttgttgatet cetetteata ettagtettg aagteeteea
                                                                  1440
cgctgtcctg catggtcttc agctcagact gcaggcgccc tttgtcattg cccaaggtat
                                                                  1500
ctagctgctt cctcaggaca ctgaggtagg tctcaaagag gggctcaagg tttttgctgg
                                                                  1560
aggtggtggt cgtctgctgc tggagcaggt tccatttggt ctccaggacc ttattctgtt
                                                                  1620
gctctaagaa ctgcaccttg tcgatgaagg aggcaaactt gttgttgagg agcttgatct
                                                                  1680
gttcgcgctc ttccgtccgg actttctgga tctcagggtc aatctccacg tggaggggg
                                                                  1740
tgagcaagct ctggttgagt ga
                                                                  1762
```

```
<210> 5368
<211> 1935
<212> DNA
<213> Homo sapiens
```

<220>

```
<221> misc_feature
<222> (29)...(1271)
<223> similar to gi3645954 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5368
tggctctgca gcaggaagca cctacgaacc atcctccatg cgactggagg ccttacaggt
                                                                       60
attgactett etggeaaggg getaetttte aatgacteaa geetaettga tggagettgg
                                                                      120
agaggtgatt tgcaagtgca tgggggaagc agatccatcc attcagcttc atggagcaaa
                                                                      180
gcttctggaa gaactgggca caggcttaat acagcagtat aaaccagact ccactgcagc
                                                                      240
acctgatcag agagcaccag tettettggt ggtgatgtte tggaetatga tgetgaacgg
                                                                      300
tectttacce agagecetge agaatteaga acacecaaet etceaggega gegeetgtga
                                                                      360
tgccctgtct tccatcttgc cagaggcctt cagcaatctg ccgaatgaca ggcagatgct
                                                                      420
gtgcatcaca gtgctgctcg ggctgaatga cagcaagaat cgcttagtga aagctgcaac
                                                                      480
ttcacgggcc ctgggagtct atgtgctttt tccctgtctc agacaggatg tcatatttgt
                                                                      540
tgcagacgca gcaaatgcaa tattgatgtc acttgaagac aagtctctga atgttcgagc
                                                                      600
caaagcagcc tggtccctgg gcaacctgac agacactctg attgtcaaca tggaaacacc
                                                                      660
agacccaagt ticcaggaag agttetetgg teteetgete tigaaaatgt tacqatcage
                                                                     -720
tatagaagca tccaaggata aagacaaggt aaaaagcaat gcagtccggg cccttggaaa
                                                                      780
tttgcttcat tttctgcaac cctctcatat agaaaaaccc acatttgcag aaatcattga
                                                                      840
ggagtetate caggeectaa tttetaetgt tetaacagaa getgeeatga aagteegatg
                                                                      900
gaatgettgt tatgeaatgg gaaatgtatt taaaaateet geeetteett tagggacage
                                                                      960
cccatggacc tcccaggcct acaatgccct gacatcggtc gtgacatcat gcaagaactt
                                                                     1020
caaagtgcgc atcagatctg cagctgccct ttccgtcccg gggaagagag agcagtacgg
                                                                     1080
gtctgttgac cagtatgctc ggatctggaa tgcattggtc accgctttac agaagagtga
                                                                     1140
agacaccata gactttttgg aattcaagta ctgtgtcagc ctacggaccc aaatctgcca
                                                                     1200
ggcactgatt cacctcttga gcttggccag tgcctcggac ctcccttgta tgaaagaaac
                                                                     1260
ccttgaactg agtgggaata tggtccagtc ctatattcta cagtttttaa aatcaggagc
                                                                     1320
agagggagat gacactggag caccccacag cccacaggaa agagaccaga tggtcagaat
                                                                     1380
ggcccttaaa cacatgggca gcatccaggc accaactgga gacacagcca gaagggccat
                                                                     1440
catgggettt ttaggaagag atcetggeeg tttgttttgg acteatetgg ttteacaagg
                                                                     1500
gggcactccc agggttaaca aatccagtga agatccccac ccatactttc ctagatgtcc
                                                                     1560
gaaggeggea gtaggaagga eetgaagett gageataage atetgtggga ttteateett 🕟
                                                                     1620
cggggcagaa acaatccgtt cacgtattta tttagaatga ccttagcagc ccatttaaat
                                                                     1680
tttcacagag ggctcaaccc acctttggag tgactcccat agcactggcc atggtcaggg
                                                                     1740
ttgttggaac atctgacctg tgcatcccag gagccgagga gtcaggttgt aataccaggc
                                                                     1800
caagcagacg ggctttgagg gcatttagtc tcagaaaaaa aaaaatgtag aaggatttcg
                                                                     1860
gaattagaat titgigtatt gtateigtag tittgtaata aactaacgaa aaatagigig
                                                                     1920
tccccaaaaa aaaaa
                                                                     1935
```

```
<210> 5369
<211> 1293
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (58)...(418)
<223> similar to gi3941728 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5369
ggctttggga ggggagccct gatccgcctg aatatctggc cggcggttca aggggcctgc
                                                                       60
aaacagetgg aggtetgtga geaetgegtg gagggagaea gagegegeaa teteteeage
                                                                      120
tgcatgtggg agcagtgccg gccagaggag ccaggacact gtgtggccca atctgaggtg
                                                                      180
gtcaaggaag gttgctccat ctacaaccgc tcagaggcat gtccagctgc tcaccaccac
                                                                      240
occacctatg aaccgaagac agtcacaaca gggagccccc cagtccctga ggcccacagc
                                                                      300
cctggatttg acggggccag ctttatcgga ggtgtcgtgc tggtgttgag cctacaggcg
                                                                      360
gtggctttct ttgtgctgca cttcctcaag gccaaggaca gcacctacca gacgctgtga
                                                                      420
gtacctggcc agcagcaagt acctgagtcc cagctcacct cctggttcct gccccaccgt
                                                                      480
teceetteag tacceagggt getgtettet ceatgggeaa geceteagga eggtgaeage
                                                                      540
gtgctccatg tgagccacac cccttttgtc tcctccagtt ggggtgtttc ctttgtcaga
                                                                      600
tgttggctgg gaccaggact cagcctgggc cagtctagga gcccagctga gccctcctgt
                                                                      660
gtcttttccc ttcatgctgc cagcagggaa gagaaccagt aggtgccagc ccaggcaagc
                                                                      720
ctgtggcccg cgtttctgtg gctgtgggca ggagctgggc cttgtgtcta gttgggtttt
                                                                      780
gctctgagaa ggggagctgt gcctgaggcc ctctgtgtgc cgtgtgtgct gtggggcggg
                                                                      840
tegecacage etgtgttaaa gtgtttgete tteetetget geeteetete gaggeagggg
                                                                      900
gtccttggct ggctgaggca gtgtcacctt cctgagtgtc ctctttggcc tctgcagaat
                                                                      960
ctgacccctt tgggcctgga ctccatcctg aggggaaagg aggatgcaga gggtggcctc
                                                                     1020
tgggcaccet tgtgggtaag cggggggcgg gggcgggaaa aactetggce gecagttttt
                                                                     1080
ggeteetgeg ggeaceaage aggeeaagtg tttaatgeet gaeateteet eetgteetgg
                                                                     1140
gcctggaacc tgcagctgag aaaatccctc aaccacctcg tctcctccat cgccctgct
                                                                     1200
gggcccccca gccctgacag tgggttgtat gcctgcctct ttccaccaac tggcctgggc
                                                                     1260
actgcccca aataaaggaa ctctgcactg caa
                                                                     1293
```

```
<210> 5370
<211> 1890
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1892)...(740)
<223> similar to gi1595868 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5370
tttttttttt ttggtaaaat agctttatcc tctgtcagaa cacaaacaaa caaactttga
                                                                       60
gaggggagga aggaaaccgt ctagctcagg gctcacttag gagagggatg agattagaaa
                                                                      120
gttcaacaca ctgcttgtgc agctggagat aaagtcaaga ccctagcacc cacttataaa
                                                                      180
tatctcgtta tattaaaaaa aaaaaaaatg tccagggccc acctggctct gctcctgcac
                                                                      240
agaaagggtt catcttcact ttgtgatctc acaggtcatg gagtgagggt ggtagagagg
                                                                      300
ggcagaaatt tcagggggag gggtggctgg gaaaaagtaa aggggacaag ccaatgtgta
                                                                      360
actagegete tecaagacat geagaggagt gggggtggee tgteagggge tgaaaagaaa
                                                                      420
agccagtgct gtacctgggg ggttgtctca ctcctgtccc cacaatccct gatactccgg
                                                                      480
agtgatctgt cctttcagac acceactgtg aggtcccaat atcggggttt atcctttcct
                                                                      540
cagtcccage etgttcaget etccaaccaa gttttggggg eccetetaat gggggggatg
                                                                      600
```

```
gccccagttg cttaggcctc tgaggtcaac ccctttacat cacagccctc tccccaaata
                                                                      660
agaagcatga ggtgagctgg aggaccetee etgggaggag ggtgttetgg ggggtgagee
                                                                      720
agttttgggg tececettea gtecetgace aggeggtaaa tgtgatgetg ggeeceaege
                                                                      780
tegetggtgg agacetegaa gacataggeg gtgeagagea geagtteetg ggtgtetetg
                                                                      840
tttgtcacca cctggaggat ggtgaagttt tccaggacgc tgttcatcat gtatcgctca
                                                                      900
ggcagctgcc gcaacttgtg caagaagttc accaggtact cgcacatggg cgagcgcagc
                                                                      960
aggoggtaca caaatotgoo gtootocago tgggooogtt cogtotocac ottotocaco
                                                                     1020
acctgcttgc caaaagagca gaccttggag gaacaggtga gggtcatgtg ttccaggctc
                                                                     1080
tcatactggc tgctcactcc gtagaagcca ccactgctga tgctgccacc ggcccctgcc
                                                                     1140
tectcaccae ttgggeecca gtteaggtee geecagaaet tgaecaggaa gaaggeatgg
                                                                     1200
ggggggccac gatcatatag ctctcggagg ccaccctttt tctcagggaa tttgtcgtag
                                                                     1260
atctgccgga cgtccacact ctcgagcggc ggcgctccgg ggctggggca gtgctggctg
                                                                     1320
atgtgcacga acaggtgcct ctggtaagaa tcaactgcat ctggcggttc cacgaaggct
                                                                     1380
gagaacteta ccagetgeaa ccgggeggtg cccaggeece gageetgeea ggetggggge
                                                                     1440
gatggggtag gtgggggcag gggtgagagg gcttgggggg gctcgtaccc tgggaggtca
                                                                     1500
gtagatgggg gagtcagtga caaggtgaac ggtgtctgtg agaatggctt cacatctgga
                                                                     1560
acattccagg ggggcccaga tcctccagac caaaactgga aaagctcaga ggcctggacc
                                                                     1620
acctgaggac cagtgggacc cagtttggcc tgcagagaag gcgcggagat gagctgggca
                                                                     1680
gaggacatgg ttgccattgt ctggaaagcc ttgtccttgg aaacctggtc cacgttcaga
                                                                     1740
gccttcaact tggactggat ttcccttgat ttccttcggg ccaaaccctg gatgtgacta
                                                                     1800
gaaacctgtt ttcgagttcg ggtcttcccc gttctcagct tgatgtagcg ggcgatcagt
                                                                     1860
tcattccgac catacatctt gccttcatca
                                                                     1890
```

```
<210> 5371
<211> 1046
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1047)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (696) ... (220)
<223> similar to gill76422 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5371
gggctcagac aggtctgacc agtctttaat gggcaggcag gtgcccgagg cagcctccag
                                                                       60
catgaggcgg gacaggcatt gcccggaggt cctctgggtg gggagggcat gctcggtgct
                                                                      120
tgctgccagc tggagccagg gctgaggcgt gcagggatcc ctggccctca cggccaccct
                                                                      180
gggtgcttca aggatgaggg cggagctggc ttcactgggg cacagggctg ggggcagcct
                                                                      240
ccagtettge cetgetggge ettteggete cagttgagga ggggeegggg actggeecae
                                                                      300
gtggatgccg gggtcttgca accatgctcc ctctggctcc ttagaagccc cctggggccc
                                                                      360
agcaggacgg gccggcggtc ccccaagctg ggcagtctag agctgggcag cagcgacacc
                                                                      420
acctgcagge tggcgcccge ctctcccgca gccttcagct ccgtcaccac ctccgcgtgt
                                                                      480
ctccaccacc tgcatggctg cccattcact gacacaatgt agtcgccctc cttcaggcca
                                                                      540
gccgccgcgg cctggctccc tggaatgacg gcagcgatga ggacaggcga gtctccccga
                                                                      600
```

```
agegtgagge caaageegee eteteetegg gteaggtgga egggeeeeac eageegeeac
                                                                      660
cggttcttgg ctgagaacac agacaggggc ccctggcagg ggctcagagg tcagaggccc
                                                                      720
agetgggeca cacactgagg agaceceace tgactageae atecatecaa cetgtgeace
                                                                      780
gagggacacc gtggggttcc acaaggtggg tggggagggc tggaccacca tcaatggcct
                                                                      840
                                                                    900
gtctgaggcc atgtgctggt cagagccaca cagcccaagc tgcccatgct gggcggtgcc
tggggacggg tgtgctcacc agccgatgga agatgtcagg ccccttcccc tgggacaggc
                                                                      960
gtggcatcct ggcctctggn nttccnccgc nctggcgcag tggactcagg tttttcaatt
                                                                     1020
ggnggggng ccctggaacc ataaca
                                                                     1046
```

```
<210> 5372
<211> 1020
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (437)...(839)
<223> similar to gi3868778 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5372
agctgtgtaa aatatttgtt gtgcttgttt agaattgaat tgtaatgttc taaagcgagc
                                                                       60
aattatttct taccatggaa gctgccaaac ctctaatact tctatacttt gccagtgtgt
                                                                      120
ctaaattgca ggagatattg gtaccctaag cagaacagac acaaccttct cagacacagg
                                                                      180
aggatgaccc tgtttctaaa tagctgcaca gtctagttct ctctcctgtt tactcgttgt
                                                                      240
tagtttagtt gtctaagact atgegettge tgaggacagt catttttgaa ttetecagee
                                                                      300
cctatcgcag tgtctggcat gtgatgagag aacaggaata tttgttgaaa agtgaaaatg
                                                                      360
catattecat decateetge eccettteet eccteteet ecttetteet acceteacae
                                                                      420
taacctttgg gttttgcttt ctaggcaaag caggaaaaat gccagctcgg tctcccagga
                                                                      480
ctcttgggag cagaactact cccctgggga aggcttccag agtgccaaag agaaccccag
                                                                     -540
gtactccage taccaagget ccaggaacgg ctacctggga ggacatgget tcaacgccag
                                                                      600
ggtcatgctg gaaactcagg agctccttcg ccaggaacag aggcggaagg agcagcagat
                                                                      660
gaagaagcag ceteetteeg aggggeecag caaetatgae tegtataaga aagteeagga
                                                                      720
ccccagttac gcccctccca aggggccctt ccggcaagat gtgccccct ccccttctca
                                                                      780
ggttgcgagg ctgaacagac ttcagactcc tgagaaaggg aggcccttct attcctgagc
                                                                      840
acgcaaataa cggatgcttc atgtcgcgca ataaaagaca ttttcctatg aagacttgta
                                                                      900
ttttgggagt ttttttaaaa cctcgatggt actatggagt atttctgttg ttggtatcag
                                                                      960
tgcctttaag cggtgtaggc aaagaaatgg aaggccttaa tgtctttgcc actatgtctc
                                                                     1020
```

```
<210> 5373
<211> 1476
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (3)...(576) <223> similar to gi4164385 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5373
agggaggagc cctcacagac atcgtctccc aagtcaggct gaatgaggag cagattgcca
                                                                       60
ctgtgtgtga ggctgtgctg caggccctgg cctacctgca tgctcagggt gtcatccacc
                                                                      120
gggacatcaa gagtgactcc atcctgctga ccctcgatgg cagggtgaag ctctcggact
                                                                      180
teggattetg tgeteagate ageaaagaeg teectaagag gaagteeetg gtgggaacee
                                                                      240
cctactggat ggctcctgaa gtgatctcca ggtctttgta tgccactgag gtggatatct
                                                                      300
ggtctctggg catcatggtg attgagatgg tagatgggga gccaccgtac ttcagtgact
                                                                      360
ccccagtgca agccatgaag aggctccggg acagccccc acccaagctg aaaaactctc
                                                                      420
acaaggtete eccagtgetg egagaettee tggageggat getggtgegg gaeecccaag
                                                                      480
agagagecae ageceaggag etectagace acceetteet getgeagaca gggetacetg
                                                                      540
                                                                      600
agtgcctggt gcccctgatc cagctctacc gaaagcagac ctccacctgc tgagcccacc
                                                                      660
ccaagtatgc ctgccaccta cgcccacagg cagggcacac tgggcagcca gcctgccggc
aggacttgcc tgcctcctcc tctcagtatt ctctccaaag attgaaatgt gaagccccag
                                                                      720
                                                                      780
coccaccete typecetteag cetactggge caggeoggae etgeoccete agtgtetete
cctcccgagt ccccagatgg agaccccttt ctacaggatg accccttgat atttgcacag
                                                                      840
                                                                      900
ggatatttct aagaaacgca gaggccagcg ttcctggcct ctgcagccaa cacagtagaa
                                                                      960
aaggetgetg tggtttttta aaggeagttg tecactagtg teetaggeea etgeagaggg
                                                                     1020
caqactgctg gtctccacag atacctgctg ttctcagctc cagcttcaaa cctcgagtct
cgagagggcc acggggtggt ttttatgacc ggaatcccgc ttcctccctc acgtctgatg
                                                                     1080
tectgaaggt geagteecae etgtacagee ceteceegee aagaactgtg aatggeetge
                                                                     1140
tccaggccat ggctgggggc agggagtgag gggacaattt ctgagtgaaa gagaaagaat
                                                                     1200
                                                                     1260
ggggtcggtg gtgaaggtgc tctcacttta cagaatggag agaacatcgt gtgtgtgtgt
gtgtgtgtgt gtgtgtgt gtgtgtgt gtgtgtaagg ggaggaaagc caccttgaga
                                                                     1320
gtccaggtct ctataggtca cccacagaca gtttgaggag ggctgcctct ctctcccact
                                                                     1380
                                                                     1440
aatttetgge etgaagggae etgetttatt ggtgtgtett ecacetetae actegtgtgt
atacctggcg agtggagtgg tccacgctat gtctca
                                                                     1476
```

```
<211> 1687
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1683)...(1055)
<223> similar to gi2739433 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<210> 5374

```
<400> 5374
geggeegeat etggeteete cagggatteg geggegggge tgecaggetg aggeteggeg 60
tegeggteet egggaggge cetetetget ecaggtgeae teattteate egtegageet teatttegt tgetaageet gaaggtetet aagattttgt ettetgggag agacageaa 180
ggageaggea teaactttee aggaagaceg tttgeettag caaagggatt ttetgagtge 240
```

```
agggcaggct ggccttggca gctgggcacc atcaggcgct aggccgtttt ctttcgggtc
                                                                       300
 actgtcgctg tctgcactat tagcaccgtt tagggtcatg ggttcttgaa gctcgtgcgg
                                                                       360
agtggcctcc tcatcttcgg catcttggcc gggagagtgg gagctcacaa tcgtaccaat
                                                                       420
 cccattetee ttgcccagee cetttgacte etegteagag teeteagagg acteggegee
                                                                       480
atagggcacc agcacgctgg agttcagctt ggatttgcca ttcatcacgg gctgggagca
                                                                       540
ggattcactg cgggggatcg gttttgttac tttactagaa actgacatcg tagatgcgtt
                                                                       600
cgaggtagac tgtactgcag aattggtaat ggtagaaaag ggaacgggct tggtagggtt
                                                                       660
ctccaaagaa ttactatgaa ggttaggttg agactgacac tggcgaacag gcaacttgtt
                                                                       720
gtgaatactg attgtaattt tttgtttctt aggatgttct gggatcactg aggacctatt
                                                                       780
aactgaccag ttttggacag aagctgaagc attaacagga ctagccctgt tqacactqqa
                                                                       840
attcccgtta ggactcgaca tggaactgct tggcgtgtct ttcaatggtc cagtcccatt
                                                                       900
taagtgaggt ggattettta teatgtgaga gggaagetgt ggteegataa ageetggege
                                                                       960
agectgtttg ttggtgacaa ceegetgact gatgaegggg eggggagagg aetggeeggg
                                                                      1020
gctatgggtg ggatgagtaa gttcacctcc atttttcaca tcatgggacc tgatataaaa
                                                                      1080
gagcacatag gettgttgge tgagtacega tetaatatea etggtagata caatggagte
                                                                      1140
attcatttga taccagaggc cattgctagc ttttatgtag cagaagtaat ggccagcatg
                                                                      1200
gcaattaaaa ccagtgtgga ccagcactgc atacaagacg tagacaattg gctctccgtt
                                                                      1260
gggttgagac atatatggcc gaatatcaag atactcaggg tatttcacat ccttagcaat
                                                                      1320
ttttccaccg gtaaaatttg caaaacgttt cagagaaagt gtaagaacat tagaggatct
                                                                      1380
atggatagtg aacctetttg aagetggaac catettttta caettgetge aettgtaega
                                                                      1440
gtttteteca teaagetgtt ceggetteae aaactgetee aatgeettgt tgacactetg
                                                                      1500
agcagcettt atetecaatg ttatateaag atatggatea aaagtatetg aaaegeeett
                                                                      1560
gcaatttaaa catttgactc tagatcttag gtatcctcca aatatctgac aaacaagagt
                                                                      1620
ggtggcctgg gtgtgtctgt ctaatttatt gctgccattc aagcatgccg acgcgtgggt
                                                                      1680
                                                                      1687
```

```
<210> 5375
<211> 789
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (790)...(382)
<223> similar to gil62781 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5375
ggtttaaaaa aatcattett accaccaata cagcaattaa taaagtteet actetttgga
                                                                       60
atttattcac taaataagca ccacctttta aaatctactc cattagaact ctacccaca
                                                                      120
acctccccac catatatatg caagtccata taaatccaaa tctcaaaaag ctgatataca
                                                                      180
aaccactcag aacatttttc gtgaaatatc tgttttaatt cagcagtaaa aggcagcaca
                                                                      240
tgatcagaaa tatgtagggt tgtgaaagag cttgccagga aatgagagct gttgcacagg
                                                                      300
gtatcagcaa ctgtgtacag cttggcaagg ttttcagtcc tgtcctccag ggaggatctt
                                                                      360
gactteteag tteecactte aggaatacat ggteaactge agecactett tgatagacae
                                                                      420
ttgaatcagg ccatctctat ctctatccag agacttgaag gcacgaaaca tggcatccag
                                                                      480
gcggaccaag cagctgatga aattgttaaa atccatatct ccatcttcat tagcataccg
                                                                      540
geggaeaate atttggtaaa gttgtteatt tagetggaag eetgeggeet geagagetee
                                                                      600
ccgcagctga gaacttccca gagacccaga atggtccctg tcatactgct tataaacaca
                                                                      660
ctgccatttc ttgatgttgt tccacagata cttaaattct tcaaagccca gcttaccagt
                                                                      720
```

```
<210> 5376
<211> 2142
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (129)...(1308)
<223> similar to gi3877668 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5376 aaggaaatca gcaagagaaa gaaaggtctg tggatttaaa ctttcttcca tcggttgatc 60 ctgaaacagt tetteagaca gggeatgaat tgttgteega attacageag egtegattta 120 atggeteaga eggaggggtt teatggtete etatggatga tgaaettett geacageeae 180 aggttatgaa attattagat tcactccgag agcaatatac ccgctaccag gaagtttgta 240 ggcaacgtag caagcgcaca cagttagaag agattcaaca gaaggtaatg caggtggtga 300 actggctaaa agggcctgga tcagaacaac taagagccca gtggggcatt ggagactcca 360 ttagggcctc ccaggcccta cagcagaaac acgaagagat tgagagccag cacagtgaat 420 ggtttgcagt gtatgtggaa cttaatcagc aaattgcagc actcttgaat gctggcgatg 480 aggaagatet tgtggaacta aagteactge ageaacaact tagtgatgtt tgttategae 540 aggecagtea getggaattt aggeaaaate tettacaage agetettgaa ttteatggtg 600 ttgcccaaga tttgtctcag cagttggatg gcttattagg gatgttgtgc gtagatgtag 660 caccagetga tggageateg atteageaaa etttaaaaet gettgaagag aagetgaaaa 720 gtgttgatgt gggattgcaa ggtttgcgtg aaaaaggtca aggtctcctg gatcagatct 780 ccaatcaggc atcctgggcc tatggaaagg atgtaaccat tgaaaataaa gaaaatgtgg 840 900 accacataca aggagtgatg gaagatatgc agcttagaaa acaaagatgt gaagacatgg 960 tagatgtgcg aaggttaaag atgcttcaga tggtgcagtt gtttaaatgt gaagaagatg ctgcccaggc agtagaatgg ctaagtgaac ttctggatgc tctgcttaag actcacatca 1020 gattgggcga tgatgctcaa gaaacgaaag ttttgctgga aaagcataga aaatttgttg 1080 atgttgcaca gagcacttat gactatggca ggcagttgct acaggccaca gttgtgttat 1140 gccaatcttt gcgctgcact tctcggtcat ctgggggatac acttcctcga ctgaacagag 1200 tatggaaaca atttacaata gcatctgaag agagagtaca tagattggaa atggctattg 1260 catttcactc aaatgctgaa aagattttgc aggactgtcc agaagagcct gaagctatta 1320 atgatgagga gcaatttgat gaaattgaag cagttgggaa atcacttttg gatagattaa 1380 ctgttccagt agtttatcct gatggaaccg aacaatattt tgggagtccc aagtgacatg 1440 gettetactg geagaaaaca teagagacag gatgaaacta gttaatetea aaaggeagea 1500 gctgagacat tctgaaatgg tgaccacaga gagctaatag ctaccagcta cctacagatt 1560 tgcagttcat aatcccgcat gttgtcaaca tactacagca ttagccacca caccttaaga 1620 tgcatttcac agccaaaata agtctcattt cttttcatga cacatttctc tttacatgtt 1680 aacaccttgc tactaccaag gcataattac ttaacatgct tcgaggctgt agattccaag 1740 tatcttaaaa gaaggaacta taaacattgc actgaaaact tgctttaaag ctttacctga 1800 cctgtcagtt tgtagacaaa caactgataa taagctttga atggtgctaa taagagtagg 1860 aattctctct attaaaaaga aaaaaaaag ttgcccttcc tccacaggtg atttattaaa 1920 tttagacagt agttaaactc ttgttagtag acaggggtgt cctcaaaatt ttactttgta 1980 attetteaaa attgattatt tttattgtgt caatacagag aaageettte agatetttga 2040 tatatcatag tcattaaaag accttttcct atttgtattg ataatgtatt aaaagttgtt 2100

```
<210> 5377
<211> 922
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (925)...(207)
<223> similar to gi3868802 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5377 tttttttttt tttgacttgc aacaggaaga acttttattg aaacaccacc atagagaaaa 60 agccaaagaa atggtactat tetaaaaata aettgtetta atteattgga agaaaageag 120 aaaaataagg ggacccttat ttaggaaact agcttcattt tggtatttta atttgggggc 180 cattetgtet cagaggetgg agtteaggaa gacaccetet gtteattett gttgttgaet 240 ttggtggatt tetetteeae agtgtgaaet etggatgaga gaaetttgee aegaggatet 300 atctcttcaa caactgtttt gacaatggtg gttttagatg aatcttttgt ttgatttcct 360 gggcctccat agccttttga tttagaacag gagccatctt ctccatctat caggaggcag 420 taggteteaa tttettttte eaggtggace ttgatgteaa ggagetgete atactegage 480 ttctggccct cggtctcggt tctgacctgg tgcagctgct cctccagggc cccgatctga 540 gcctggatct gtgccagctg tgcacagtag ttactctcgg tctctgtcaa ggagcactcc 600 agggagtgtt tegttgetaa gagggaetga agtteaatet caagggtttg aagagtgegt 660 ttcatctcgg taagctcatt ccgggctgag gtggtggcgc cagcgtcgtc agagatctgc 720 tgctgcagcg aggcgctctt ttcgttgaac caggcctccg cgtccctgcg gttctgctct 780 gegagggett egtacteage tegeatattg tteageagaa cegtgaggte tacceegggg 840 geogegitea tetecaegit caegitgeet ceageogege actgaagage titeatitee 900 tecteatgat tettettgag ga 922

```
<210> 5378
<211> 2897
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (14)...(1969)
<223> similar to gi5081610 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5378

	cccacgcgta	cggccaggtg	ggagtgaaga	ttgtgatgtg	ttggaggcca	cccagcccct	60
	ggaacagggg	ttcctgcagc	agctggagga	gggccccagc	agttctggac	agcatcagcc	120
	acagcaggag	gaggaggaat	caaagccaga	accagagagg	tctggcctca	gttggagcaa	180
	ccgggagaag	gcaaagcagg	cattcaagga	actgctgagg	gacaaggctg	tcccctccaa	240
	tgcctcatgg	gaacaggcca	tgaagatggt	ggtcaccgac	ccccgttaca	gtgccttgcc	300
	taaactgagt	gagaaaaagc	aggcattcaa	tgcctacaag	gcgcagcggg	agaaggagga	360
	gaaggaggag	gcccggctaa	gggccaaaga	ggccaagcag	accctgcagc	atttcctgga	420
	gcagcatgaa	cgcatgacct	ccaccacccg	ctaccggcgg	gcagaacaga	cctttgggga	480
	gctggaggtc	tgggctgtgg	tccctgagag	ggatcgaaaa	gaggtttatg	atgatgtcct	540
	cttcttcctg	gccaagaagg	agaaggaaca	ggccaagcag	ctccggcgcc	gcaatatcca	600
	ggccctaaag	agcatcctgg	atgggatgag	tagtgtcaac	ttccaaacca	cgtggtccca	660
	ggcccagcag	tacctcatgg	ataaccccag	ctttgctcag	gaccatcagc	tgcagaacat	720
	ggacaaggaa	gatgcactga	tctgttttga	ggagcacatc	cgagctttgg	agagggaaga	780
	ggaggaggaa	cgggagcggg	cccggcttcg	ggagcgacgc	caacaacgca	agaatcggga	840
	ggccttccag	accttcctgg	acgagetgea	tgagacaggg	cagctgcact	ctatgtccac	900
	ctggatggag	ctatatccag	cagtcagcac	tgatgtccgc	tttgccaaca	tgctgggcca	960
	gccgggctcc	acccctctgg	acttattcaa	gttctatgtg	gaggagttga	aggcacgatt	1020
	ccatgatgaa	aagaagatca	ttaaggacat	ccttaaggac	cggggcttct	gcgtggaggt	1080
	gaacacggcc	tttgaggact	tcgcccacgt	cataagcttt	gacaagaggg	ctgccgcact	1140
	ggacgcaggc	aacatcaagc	tgaccttcaa	tagtctgctg	gagaaagcag	aggcacggga	1200
	gagggagcgg	gagaaggagg	aggcacgcag	gatgcggcgc	agggaagctg	cctttcgaag	1260
	catgctgagg	caggctgtgc	ctgctctgga	gctaggcact	gcctgggaag	aggtccgtga	.1320
	gcgttttgtg	tgtgactcag	cctttgagca	gatcaccctg	gagtcggagc	ggatccggct	1380
			tgctggagac				1440
	aaagcatggc	aggaaaggca	agaagcacca	tcacaagcgt	téccactcac	cctcaggctc	1500
	tgagtcagaa	gaagaggagc	tgccccacc	atctctccgg	cccccaagc	ggaggaggcg	1560
	gaacccctca	gagtcaggct	ctgagccctc	ttcctcactt	gattcagttg	aaagtggggg	1620
	tgctgccctt	ggaggacggg	gctccccttc	ctcccatctt	cttggagcag	atcatggcct	1680
	tcggaaagcc	aagaaaccaa	aaaagaaaac	taagaagaga	agacacaagt	cgaatagtcc	1740
	tgagagtgag	acagaccctg	aggagaaagc	tggcaaggag	agcgatgaga	aagaacaaga	1800
	acaggacaag	gacagggagc	tccaacaggc	agageteect	aaccgttccc	caggctttgg	1860
	aatcaagaag	gagaagacag	gctgggacac	gtcagaaagt	gagctgagtg	agggtgagct	1920
	ggagaggcgg	cggcggacac	tcctacagca	gctggatgat	caccagtgac	ccaatgagct	1980
	gttctctgcc	tcgggtctgt	gtgaggccat	ggctcctggg	gccaccctcc	accggtctgc	2040
	ctcagacttt	ttccttagtc	tggtctgtgt	ccacttttc	taaagtaacc	ccccaacccc	2100
	cagcacacca	ttgttggcac	ctctcaaggt	tgctcttggt	gttcaagggt	cccctactcc	2160
	ctggactagt	gcagtccttg	ccctcagccc	cagaccagag	atgggtggta	tatgccatgt	2220
	ggggtgggtg	atgccagtag	ataaaagtgt	gagagaaggg	gtctccaggg	aagagtcaca	2280
	ggctgttgga	cacagcctgg	gtggcagagg	gcagggtcat	caccctctag	catcagtgcc	2340
	tgctcctgcc	tgccctggcc	ctgaggctcc	accacttctt	cctccaccca	ggacctaatg	2400
	tacgtgtgtt	ttgttttttg	tttttaaat	aacaatattt	ataacatggc	cagtgactct	2460
	tttccatgtg	ctactggggc	aggctgggga	ctggacacat	gcccagcaga	gggcactagt	2520
	gtctcatggc	aggcctgctt	ccctttgtgt	ggctagagcc	cacctagccg	gttctccttt	2580
			ctcctccaaa				2640
	tatccccata	gcccaggtca	gactaaatgg	ccaccctagc	cccctaagct	cagaaagagg	2700
•	agacaaagtc	aggcctggtg	catcaagcct	ttgttgagag	ggggagagtc	tgaggtttat	2760
			ggtggtacat				2820
	ccaggggcag	aggagaaacg	ggaaggtaag	caaatagcca	agaccaccat	gctccttgtc	2880
	ccctgccaaa	aaaaaaa					2897
						•	

<210> 5379 <211> 2214 <212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1)...(1084)
```

<223> similar to gi4731361 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5379
                                                                       60
atgraggegg teegegeeac tgeeteteag teeetgteet gegeeegege geeeegggag
                                                                      120
cctacccage acgegetecg egeceaetgg ttecetecag eegecgeegt ecageegagt
ccccactccg gagtcgccgc tgccgcgggg acatggtcct ctgcgttcag gggtgagcac
                                                                      180
ccccttgtaa gctcagggct actgttgggt gtcagggaac aaagttttag actgctgcgc
                                                                      240
                                                                      300
tccaaagegg gcacacacat gtacctagaa cacaccagec actgtcccca ccatgatgat
                                                                      360
gacacageca tggacacace cetgeecaga cetegecett tgetggetgt ggageggaet
                                                                      420
gggcagcggc ccctgtgggc cccgtccctg gaactgccca agccagacat gcagcccttg
cctgctgggg ccttcctcga ggaggtggca gagggtaccc cagcccagac agagagtgag
                                                                      480
                                                                      540
ccaaaggtgc tggacccaga ggaggatctg ctgtgcatag ccaagacctt ctcctacctt
egggaatetg getggtattg gggttecatt aeggeeageg aggeeegaea acaeetgeag
                                                                      600
aaqatqccag aaggcacgtt cttagtacgt gacagcacgc accccagcta cctgttcacg
                                                                      660
                                                                      720
ctqtcaqtqa aaaccactcg tggccccacc aatgtacgca ttgagtatgc tgactccagc
ttccgtctgg actccaactg cttgtccagg ccacgcatcc tggcctttcc ggatgtggtc
                                                                      780
agecttgtge ageactatgt ggeeteetge actgetgata eeegaagega eageceegat
                                                                      840
                                                                      900
cetgetecea ecceggeeet geetatgeet aaggaggatg egeetagtga eccageactg
cetgeteete caccagecae tgetgtacae etaaaactgg tgeagecett tgtaegeaga
                                                                      960
ageagtgeec geageetgea acacetgtge egeettgtea teaacegtet ggtggeegae
                                                                     1020
gtggactgcc tgccactgcc ccggcgcatg gccgactacc tccgacagta ccccttccag
                                                                     1080
ctctgactgt acggggcaat ctgcccaccc tcacccagtc gcaccctgga ggggacatca
                                                                     1140
                                                                     1200
geoceagetg gaettgggee eccaetgtee etcetecagg catcetggtg cetgeatace
                                                                     1260
tetggeaget ggeceaggaa gageeageaa gageaaggea tgggagaggg gaggtgteae
                                                                     1320
acaacttgga ggtaaatgcc cccaggccgc atgtggcttc attatactga gccatgtgtc
agaggatggg gagacaggca ggaccttgtc tcacctgtgg gctgggccca gacctccact
                                                                     1380
                                                                     1440
egettgeetg ecetggeeac etgaactgta tgggeactet cagecetggt ttttcaatee
                                                                     1500
ccagggtcgg gtaggacccc tactggcagc cagcctctgt ttctgggagg atgacatgca
gaggaactga gatcgacagt gactagtgac cccttgttga ggggtaagcc aggctagggg
                                                                     1560
actgcacaat tatacactat ttatttattt attctccttg gggttggtgt caggggcgag
                                                                     1620
                                                                     1680
ccaaccccac ctctatgccc tgagccctgg tagtccagag accccaactc tgccctggct
tetetqqtte tteectqtqq aaaqeecate etqaqacate ttgetgqaac caaqgeaate
                                                                     1740
etggatgtee tggtaetgae ceaecegtet gtgaatgtgt ceaetetett etgeeceeag
                                                                     1800
ccatatttgg ggaggatgga caactacaat aggtaagaaa atgcagccgg agcctcagtc
                                                                     1860
cccagcagag cctgtgtctc accccctcac aggacagagc tgtatctgca tagagctggt
                                                                     1920
ctcactgtgg ccgcaggccc cggggggagt gcctgtgctg tcaggaagag ggggtgctgg
                                                                     1980
                                                                     2040
tttgagggcc gccactgcag ttctgctagg tctgcttcct gcccaggaag gtgcctgcac
atgagaggag agaaatacac gtctgataag acttcatgaa ataataatta tagcaaagaa
                                                                     2100
                                                                     2160
cagtttggtg gtcttttctc ttccactgat ttttctgtaa tgacattata cctttattac
ctctttattt tattacctct ataataaaat gatacctttc atgtaaaaaa aaaa
                                                                     2214
```

<210> 5380

<211> 1512

<212> DNA

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1515)...(918)
<223> similar to gi1228052 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5380
ttttattttg gtagttgttt ttatggatgt gaaaaatatt accactgcaa ctagcaagaa
                                                                    60
                                                                  120
ctataaatga tacattattg caagtgttct aaaaaatcag gaacaaaact aatttattat
agttctgtct tcattataca ccacgtgttg gtgagttaaa cacaacaaaa ttgtcttttc
                                                                   180
ttttaaaagt gtctactaaa gataaaaaga ataagataac aattaacatg tagtttgtta
                                                                   240
cattaaaaaa totgatatac atatttotat tooctottag ottottotaa qootottaa
                                                                   300
ctattacaac aaaaaaaaa aaggaaagaa aaagaaaatt cattgtttaa aggcaaacat
                                                                   360
tcaattcagt tgatacaaca ttacagtaca gtcaactaac atcattcaac gaaggtaaca
                                                                   420
agtitagect tagettettg agtitaaaagt etatagacca gattgetaca aaagtiteaa
                                                                   480
tgctgcttca aaaccgtatg ttagcttttt ggaggacaaa gtactttcta cggatggctt
                                                                   540
cagaaggggt catgctactg gtaaaagcac aggggaaccc catcctgtca ttaatcattt
                                                                   600.
660
ataatataat aacaatcata ataatgataa gaataaaaac caaacacaga ctggaagcct
                                                                   720
agagtegetg geageegtgt caaaccettg egataegeta tactaaaaaa atttgaaata
                                                                   780
tccaccegtc ctctccactc tgccacaaac tagcaaagtc aaaaatacaa aagtcttcaa
                                                                   840
cttgttcact tttgcagaat aaagcaaaaa cgtctttgtg ctccttacta ccagaaqcaa
                                                                   900
aatateetet gagttaeeae atgtaatage ttetggatgt gtegaeetgg gttggettgg
                                                                   960
tgtctgcaga accatctttg tctttctcgc tgtcaccttc ccagaggtta atgagtggtg
                                                                  1020
ggtacagete attragtggg attgaaqaqq ttttttqcat atacttttt aatqaqtqqt
                                                                  1080
ggtagttttt tetettaaat ettttggeaa agtacacage aatggacgea aggetaatga
                                                                  1140
cggcaaacat agaccccatt actgcagcaa gggctgtact ggtttcttga tcagagatgt
                                                                  1200
ccactgcgaa ggcggcattt ttggttgtga catttacgca tgacttttga qtctqctqat
                                                                  1260
gaatattgga cactgtgaga cacacttcat aatctgtgga aggctgcaga tgcgttaggt
                                                                  1320
tgtattcatg gacatcgact gggaccctgg cagtatatgt tatgtgaggg ttatcaatct
                                                                  1380
teatggtgge agacgaccat tttaagtttg acgteatgae attggaatta actttecagg
                                                                  1440
acactaagat ggaatgggat tetgtetget tgaegtatat ttttageace tgggtaecat
                                                                  1500
ccagaagggt cc
                                                                  1512
```

```
<210> 5381
<211> 2197
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2195)...(580)
<223> similar to gi2924552 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5381
tttttttttt tttaatgaaa atatgtgaca cttttattta caagcttttt tqcataaact
                                                                       60
atacttaaca tgactaaaca acaaaaagtt cttgacttcc atcctttatg ggtagaaaaa
                                                                      120
taaattattt taataqttat ttaaacatgc ctcctgcttc caqaqaaatt aatqtgttaa
                                                                      180
atatatatat ttttcaaatt atccctaaca tttacacaaa cttgagtaga tactgctcta
                                                                      240
tttttacaca gaattgtaaa cagcetttta aaaagetaga gtaactttee actagttaga
                                                                      300
actgaacatt gtaaaatata aaaattttat aaaccctata atgcaggtaa tttaattatg
                                                                      360
actgatctgt aggaatatac aataaaaatt tgtcagtcat ccacaattaa gtacaattat
                                                                      420
ttatggagaa aaattttact atgtccagaa aaagatttta ttcatgttct tgaaagatag
                                                                      480
ctttgttccc aataaatatt ccctcctact atttttgtac attttaggaa aagatgtatt
                                                                      540
cagttcaaaa ataagtaaca tccagttatt tgactttttg ctttttctt gcttgaaact
                                                                      600
gctctgtttt ggtttttata gatttaatca acattgacaa agcaggatca atggacttcc
                                                                      660
tttgtgattc cttttcaatc tcactctctt ttttctttat tgcctgagta aqttcttqtt
                                                                      720
ettitegtte tettigeegg geetteteet caaggatitt tieeataget titgtittet
                                                                      780
tgaaattggg atctgagggg tccaaattga acaagtggga agtgtacatt gcctgaaacc
                                                                      840
gtgcatcgtt aacatttacc tcaaagtcat cctctattaa ttccttcttt ttcatgagct
                                                                      900
getttttett etttttgete agattetggt getecaeaat ettgttgtaa ttqaaqtgtt
                                                                      960
tettactgte etegteetea tecateataa geaaageeat tteageettt tgtettteta
                                                                     1020
tttcaatttc ttcttctgga gatgtgccat cttttgcaga ttttaccgat tttttattta
                                                                     1080
tacctatttg tttaacttct tcagcaaagt atgggtcatt caaatcaaca tcagagggaa
                                                                     1140
gttcctcttc actggcctct tcagcaagag ccttctgttt ccttttcagt ctttttttct
                                                                     1200
ctttcttctt ctctaaaaat tgttcccaag gggtcagttt atcctttcct tcccatttgt
                                                                     1260
ttttgaccat ctcttctgca ctttctttaa gacctggaac ccatttaatt tccatttcca
                                                                     1320
tatcattttc tttgcctttt ttttttttt cttgaataac ctgcaagagc tgcctgtatt
                                                                     1380
tageaatttg ttetteatea teettetgae ttttetttgt ttteecatet tettetaeat
                                                                     1440-
tgactccatc atcaccttgt agetectett etgteteete tteatettea etagaggaag
                                                                     1500
ctaagtaggc ttgaaaatcc atgtccaaaa gctcttcctt tttaaacttc ctgttgagca
                                                                     1560
tigiaatici ticaigatca gictcaicce aagigatite caeegitgat giteccaitq
                                                                     1620 :
cagcagaagt gaaatatttt ggtttatatg ctgttaaatt cacttctgag gctacatcct
taggeteate ateaaaagta atateatetg gtataaaeet tagatetatg aaagaacaae
                                                                     1740
tactttcaaa ttccaggcca tcacaatcct cataaatttt actagctgtt tccggagaat
                                                                     1800
cacagictac tactgcataa tagtactica gicgittgaa tigataatci cicaattiti.
                                                                     1860
ctctagacgt ccagtctttt tctggggcat cttcaggaat acttaatagc tctactggtc
                                                                     1920
cttgaacttg ctcttccttc atcctctcct ttccaaattc tgaaggatat atcttgacgg
                                                                     1980
aaaatattac acctcctttg ggtttaaatg aattgaacag agccagcaaa tcttttgcct
                                                                     2040
ttaatctatc ccagtccatg ttacaaactg ctaatcgacg tgtaatctca tcagcacgag
                                                                     2100
gagcatettt atetaattet etecaageat geteaaaace agattettet ggaaacaaat
                                                                     2160
ctgccgtatc atcttcatct tcagaactag tttctat
                                                                     2197
```

```
<211> 1520
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(648)
<223> similar to gi4589624 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

<210> -5382

```
<400> 5382
tttttcagta gggattctgg ccaagactcc agcaagcata ttgagctgat aaaagggtac
                                                                       60
cagaacaagt accccaaagc agaaatgacc ctgatcccaa tgaagggaqa qttttccaqa
                                                                      120
ggtcttggtc ttgaaatggc ttctgcccag tttgacaatg acactttgct gctattttgt
                                                                      180
gatgttgact tgatcttcag agaagatttt ctccaacgat gtagagacaa tacaattcag
                                                                      240
ggacaacagg tgtactatcc catcatcttt agccagtatg acccaaaggt aacaaacggg
                                                                      300
ggaaatcctc ccactgatga ttacttcata ttctcaaaaa agactggatt ttggagagac
                                                                      360
tatggatatg gcatcacctg tatttacaaa agtgatcttc taggtgcagg tggatttgat
                                                                      420
acctcaatac aaggctgggg actagaagat gtagatctct acaataaagt cattctatct
                                                                      480
ggottaaggo cattoagaag ocaagaagta ggagtggtgo atattttoca tocagttoat
                                                                      540
tgtgatccta acttggaccc taagcagtat aagatgtgct taggatccaa ggcaagtact
                                                                      600
ttegeeteaa eeatgeaact ggetgaacte tggettgaaa aacatttagg tgteaggtae
                                                                      660
aatcgaactc tctcctgaca gtccaggcaa cacattttgc cttttttaaq qqqaqtttac
                                                                      720
ctcattgttg gttgttgtta tttttattgt attattgtta ttttattatt attattgtta
                                                                      780
taattttatt ttgttgtcct ggtcttaaac tactcttggt tgtcttccta agggtqtttg
                                                                      840
ttgacctcaa gcaagaagag tctgcagttc actgatgttt cagatttcta ctgaagtcaa
                                                                      900
tatgttatta cttttatata actttatttg agattgagtt aaatcatagc aatcaaatga
                                                                      960
cttttgaaac gcattcatca caagagacag cttagaagaa tgttctcttg gggcttaaag
                                                                     1020
atgcaatate gaettttatt tggtttetea aatteaatgt gatacaaata tttactggtg
                                                                     1080
aaaggtacca caaaagtgct ttatgcttcc tatggggaag ggactctgta acataaactt
                                                                     1140
gagttttgta atttatacaa ggacttaaat atataaacaa taattttett catetttaga
                                                                     1200
atttttaaag taaatgaata cctatgattg tatgtttatt ttttaaaaaa agttttaaaa
                                                                     1260
attgaggagt tttgttccac aagcaaccgg tactggctac cctggtctta tgacaattat
                                                                     1320
gageteetea caactgtetg etataaatge gaatgaactt tattttetea aggaaatatg
                                                                     1380
atttaattaa atattcatgt acattttaga agctttatga aacaatgtcc ttcatttgct
                                                                     1440
ggcaagaaga taaaatatga cagaacctgt ttatttaaaa taaaacacag gtatagcagt
                                                                     1500
attetttte aaaaacactg
                                                                     1520
```

```
<211> 2850
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2767)...(1222)
<223> similar to gi1825589 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<210> 5383

```
<400> 5383
ttttttttta gacccgcagc ttttattagc catcgttaca gtctctcgtc cacaaacact
                                                                       60
gcccagctcc cttcccaggg cactttactg gaggcaagtg caaaacactg tggtgctttc
                                                                      120
tattcaaaga aacagaagat gtagctgtgg tggtaatgga cagcccagct acccaccagt
                                                                      180 ·
tttacagcag gatccgcagt gagcttgata cagatagagg atagatgacg gtaaaggggg
                                                                      240
aaaagagttt aaaattatcc aagtttccct cttgaaaggt cttttcccca aagcactgtg
                                                                      300
aagaggactg ctgcttaggc aattttctag ggacttaaac acaccgatgg gaatataaat
                                                                      360
atttcaaaca caacccctgt tacattctta cagctagttt catcacttag gtctcttctt
                                                                      420
agettaaatg atgeteettg aatetgtttg gteettggag gggeaateea tttttgtttt
                                                                      480
ctgtaatatt gacaatcacc ttctttaatg cagctataac atcaaagctc tgttaggtta
                                                                      540
cttaaccett cactettaaa etaaaagttt teattateat eteaegtgaa tecaatgtge
                                                                      600
```

```
aggttttqct tqcttattta aqaataaaac aaaacaaaca taaagggttq aaaaacaaaa
                                                                      660
actictgcttt ttttttcttc aagaggaaac tatgtaagaa tacataaaag gcaaagttgg
                                                                      720 -
ctacttgaaa tocaagaatg gttttaatgt gttggccgag aaaaataaac tqtaaagttc
                                                                      780
tgtgaggtet tetaaaaatt tacaagaaaa aetgatggge agttetaate agaettggat
                                                                      840
gttatctttt cccccctttt taaaaatgac aacagataca gttccacaaa atacaataga
                                                                      900
aactgttttt ttatcttgac tgccagagac gctcctttgc aatgccttcc ggtaaccaaa
                                                                      960
tttttgggca caacacacag ctggccttca tttcttcagg ggctggtaaa cagaggcatt
                                                                     1020
ggggtcaagt ccagaggggc tggtctccac aaatttggga agtagtagtg ggggggaaaa
                                                                     1080
caggggctca gggggctggg tggcgggcac tgtatgttat ggctgggcat gacggcccat
                                                                     1140
gacttegget atettetett ttaggteett gattteetga tetttetgaa ggatttete
                                                                     1200
ttgggcaatc tcgagctgcc gctttgcatc gcccagtgcg gagaacaggt ccagcttgat
                                                                     1260
tetegtetet geaettaage tgtteteeag gtgetgtgtt ttgtettgea tggetgagag
                                                                     1320
ggctgacatt aacacctcag tgtccttctc attttcctta tatttccgaa gctcctggac
                                                                     1380
ttttagttet agttetetga tttggtette ttteaeette atgteeateg tgagettett
                                                                     1440
gecetetget tetagttete tgateegatt eegtaaggtt teggtgeatt eteceetaga
                                                                     1500
tgcagcagca aacgcaacag cccgggcagc agtggcttct tctaacttct tcctcttttt
                                                                     1560
ctcttccatt aactgtttct ctacaaaact tcgggcttcc tgctcagctt ttagcttttt
                                                                     1620
ctccaactgg ctgatattct gcttgtcttt ttgcttcatt tgcacagcat tatgtaactt
                                                                     1680
gttctgcagc agctcgttct cctgccgaag ctggcccatt tctgagcgga tccctcgctc
                                                                     1740
ggtgctcgaa agggagctga tctgactgcg gagctcttgt tccacttgtc tgctggcttg
                                                                     1800
caggicages titaactitt taatgictig ticcageetg accagigegt eiggitiget
                                                                     1860
tagctggtta ttaggaatac agttttccat taagtccttg tgtgtacttg ggctcttgct
                                                                     1920
agigcatttc tgcttctict catttttact agatgaggaa ggaatgctcc catttgtggc
                                                                     1980
gctatgactt cgaggtgaag agttcacaac tccactggca tttttgtaat tttttqaqqa
                                                                     2040
agcagtgcat gagtcctctt tcaagagatt ttctgtactt cccacaagat cattatttaa
                                                                     2100
tettttaeta tigataiggi titteeatata eteaatetet igiattitag agietaeagg
                                                                     2160
ttgtagaata ttgttgttat ttattccaag gttgtgtttt ttggcatcct tgtccttttc
                                                                     2220
tttccctttt tctcggtatt ctatctctgg caaagttgtg gagagttttt tqttqqctqq
                                                                     2280
gataceteca ttgtggtgta taaggatega agaatecata teaggtaate etttggetge
                                                                     2340
tteeteggee tettittett gettetgtag catetgtige tetggaggga gagettgttg
                                                                     2400
aagaagttgc atgtaaaact cgttctcttt ttgtacttct ttttgcttcc ttaaccgcat
                                                                     2460
tttgtagctt acgtaacttt tgaagccaaa ccccaaagtt accacagggt acccaataca
                                                                     2520
gtgagcagca aatggacgac aaaggtctac atgaaagttt ttgagatctt taaatctaat
                                                                     2580
ggctgcttca atataaacaa aaaggatcca gagagacact gtaggcaaac acactcccct
                                                                     2640
ttctgtgtgc catacgtact gaacccatac atatgtgcta gcagcaaaaa aaagccactg
                                                                     2700
tatggggatg aacagcaggc atattatatt tgacgtgaat gctacacaaa caaaaaatac
                                                                     2760
tgagaaggcc taaagggaaa aataaaacaa aataaaagat tcatcttaga accccacgcg
                                                                     2820
tccgcggacg cgtgggtcga accgggaagt
                                                                     2850
```

```
<210> 5384
<211> 663
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(433)
<223> similar to gi468032 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5384
ggggetgtea aggeegtage atggtgteee tggaagteea atgteeegge aacaggaggg
                                                                       60
ggcaccagtg ategacacat tggcatetgg aacgtgtget etqqqqeetq tetgagtgee
                                                                      120
gtggatgccc tttcccaggt gtgctccacc ctctggtctc cccactacaa ggagctcatc
                                                                      180
traggeratg getttgraca gaaccagetg gttatttgga agtacccaac catggraaag
                                                                      240
gtggctgaac tcaaaggtca cacatcccgg gtcctgactc tgaccatgag cccagatggg
                                                                      300
gccacagtgg catctgcagc agcagatgag accccgaggc tatggcactg ttttgagttg
                                                                      360
gaccctgtgt ggcggcggga gcgggagaag gccagtgcag ccaaaagcag cttcatccac
                                                                      420
caaggcatcc gctgaagacc aacccctcgc ctcagttgtt ttttattttt ctaataaagt
                                                                      480
catgtctccc ttcaaaaaaa aaaaaacaaa actggggggg aattaccaaa ttggattcaa
                                                                      540
tcctggttta aaaaataggg ggcctttttc ctttaaaaaa aaaaaaaagg gggggccctt
                                                                      600
taaagggtac aaattttaaa accegggggg geggaggtta agttttttaa aggggcccca
                                                                      660
                                                                      663
```

```
<210> 5385
<211> 692
<212> DNA
<213> Homo sapiens*
<220>
<221> misc_feature
<222> (542)...(462)
<223> similar to gi3152662 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5385
tetecectaa tacaactatg tittaaatge actgatgica tgeaaatggg etgtgegeet
                                                                       60
gctgattaca attaaagtga tttaacaaaa aagagactca aaaggtctca cccaaccttt
                                                                      120
gaacacatgg gaagtttaat coctoctoct cocttttttt ttttaaataa ttaagggaat
                                                                      180
gactagettg teatteetae cagaacaact ggtacetgta eteatttete taccatattg
                                                                      240
tttctcttta gcatagctac agacctcctc agggcatgct atcccatttt ctgaaagtca
                                                                      300
aataagacaa aatcaaacat ccaagtgaga gacacattag acagttetea tteeccagag
                                                                      360
catctccatg gcacagatgc atgaaaaaaa tgggaacaga ttcctcattt gcatagaagc
                                                                      420
taaatagcta tattaaatct tattttaaga gtttcctttt acctttgctt cgtaaccatt
                                                                      480
aacaacttet getttatetg teeteeagee eeagaateeg gatttagtte tgataaaaag
                                                                      540
tgaacaccac aaatttctac atgtacaata tgccattcag atttatatct qtaqccttta
                                                                      600
tagttttttt ccccccagc ttaagttagt gaaggacact tggaaatcat ggtcctattg.
                                                                      660
tccacaggag gcggttagca atgacagatg gc
                                                                      692
```

```
<210> 5386
<211> 4703
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

```
<400> 5386
ttttttttt ttgtacaaaa cctggaaata tttttacttt tttaaaactt tgatctaagt
                                                                       60
tgccttagac ctcatggact cgatacaaga gtaaatatga attgggaaat aaaaccactt
                                                                      120
                                                                      180
taatagccac gataaacttt gttagaaatg tacatgttgc caaaataata ataataaaat
                                                                      240
taaaaaaaag agagagagag aacagcttga tgtccaggtt agattatata aatgttcaac
aagggcaggg taaaggaaac tttaaaaaca ccagttctga ataagcctgg ggccccgtga
                                                                      300
gactececet eteccaceca gtetegggee etagggaetg egteceteca aacaggacaa
                                                                      360
gtgggagtgg ataaggcctc caccaagctg cctctcccag tggacaaaaa catccaggta
                                                                      420
atgggtatat aaacaaagct cataagaaat gtacaaatat aaaaagctac aaacattaat
                                                                      480
aaattacagc atcacaaaac acggaaacac ttcacaaggt gctagtaaaa taactgtatc
                                                                      540
ccccaatccc ctcatcatac aaggaaaaca aagagctggt attaaagttg aagattcatc
                                                                      600
ttcaaaatgt gtctgaaata gatcttttgt gtactatttg cttctgtaaa gacagagtgt
                                                                      660
aaggctgcac agacatcact tgtttttcag gcaatacctt agttcttaaa agaaaaaaat
                                                                      720
aataataata aaaggaaagg agaaggaaaa agcatcagaa cccaactgtc catctgactc
                                                                      780
agcaaaaaac togtataaat gttaatgaag aactotatag aaagaaatto otaaagatac
                                                                      840
ttttactett ataaaaaaga agttätttaa aaagetattt acaegetaca ttetatgaaa
                                                                      900
aatatgette aggaaataca tetaaaatta aaatacagga ttgeetgaga aacaaateca
                                                                      960
gcccctccgt gtcgatggtg gacacaccat ccaggtacga cccatgcagg cgacaccaca
                                                                     1020
egetgacaeg ggagaacaga gaagtgeega eegtaagtee tegggeegee tggeeaetgt
                                                                     1080
ecctgeeeet geeetgeee tgeeagteee agggeagggg tgeettgget gagaagtget
                                                                     1140
tctccagagt gtggccagca gggcaagacg gtccctgcca catggcttag cctgggcctc
                                                                     1200
ccagacccca agatgtggct gagcccttgc cctttcctgg ggaccccaca atggctcccc
                                                                     1260
tgcccgctaa cacaccaacc cagctgccag tettagetge cccccagaaa tgctcctggg
                                                                     1320
cattcaggct gaacacccac catcctgctg ccacctgcca accagaaagc tcggggcaga
                                                                     1380
ccettcetca cccgccgagc actgtctgga cttggctgag aatcactcag gaagagaagg
                                                                     1440
ggggacataa acatcccact tgctcctcct ctttctgtgt tctttgcctt ttttttaag
                                                                     1500
cccctggagg ctgccagct gtggccagct ctgactctgg ggctggtgag cattggctca
                                                                     1560
ctctgtcttc cttgaaggac tcatgctctc agcagagctg cagaggccct gcaatcacac
                                                                     1620
ccacgctcag ggggcctgaa ggctgtcctt aaagtggaat aagcggtcct caaacttgca
                                                                     1680
gggccgcttt tctgggacag atcactctta gcaacttgag aaaagacgtc cattttcaaa
                                                                     1740
ttgaggggcc acgctgggct cgctctgccg gctgaaggga cagacgcttg ttggggagat
                                                                     1800
ggcagceggg aagaggcaag gccctccctg gtgaggcagc teggcaccet cetgggagge
                                                                     1860
agatgttttc geggggetcc gggggtcctg ageggagcag aaggatectg getttecaaa
                                                                     1920
tottaaagga gtagtttooc gttocgatga attitoaaaa ttttoccaag cototgottg
                                                                     1980
geggtegeea tgecettttt egtaegtttt cetttggeag eggtgttgtt gtttggagae
                                                                     2040
gatgcggagg gccgcctctg tgtgagaaag accccagggg ccatgggctg ggaggtgcgg
                                                                     2100
ccagcctggg ccccggtgaa ggtgccagcg gctgtgtact catggtccgc caggctgctg
                                                                     2160
ctatgcgact caggcgggg ctctggcgag ctgccctcct gcgaggcctg gctgctggcc
                                                                     2220
gtgctggtgg aggccggggt ggtggaggcc ggtgtggtgg aggcaggggt ggtagaggct
                                                                     2280
ggcgtggtgg aggtggaggt ggtacccgtg gaggcggagg cagaggtgga gatggaggg
                                                                     2340
gaggcagtgt taggagccgg cttccttttg gtgttcttct tcttcctgtt tttctgctcc
                                                                     2400
tectgetggg acagettgge tgeageaget gecageeeg teteaatgga ggecaetetg
                                                                     2460
gtcccctcac gcacaggcct gtcttgtctt ggcaccgatg gaccgaccct ggctgtgggg
                                                                     2520
ctgtacggag catcgtctga gcctttcctc ttctttgacc gggacttgaa gacggggtta
                                                                     2580
tcttcgtcag actccagtga ggggtaaaca tagtctgagt ccttgaagca ggcatccagg
                                                                     2640
tgatectget ettectegta gtegtecagg tegacactgt tettggeage ectetteage
                                                                     2700
agtogtttgc ctgcactctt gccactgcca cccccattct tccgggcacc atgggcagcc
                                                                     2760
agegagetee cettggeetg geeageteee caegtggtet geaggeagga gteggaggee
                                                                     2820
tgcaggttgg ccatggacag cattccctga atggcttcct gtgtgctggg ggaggccggg
                                                                     2880
ggctggctgc tggggttgta ctccagcgcg ccaacctcct cactggcctg cagcaggtcc
                                                                     2940
```

```
aagatgccag ctgccgagct cccactctcc ttcttgactc tggcattgcg gccgggcttg
                                                                     3000
gtgtctgtgt cgatgtgcag cgaaccetcg tccgaggagt catcactctg cttgtacget
                                                                     3060
geegagteea getttggett egtgacagge gtgggcagca cageettett atecaacaag
                                                                     3120
aaggacaagt cccttttcgg ggcgtttttc ttcctcctga tgggaaactc gtcgatcttg
                                                                     3180
ageteacegt cateegacae gtacteatae teateeegea egggettggg ettgteetee
                                                                     3240
ttgaagttet geaaggeee gaacacaca gggetegteg ggggeetgag ageettggag
                                                                     3300
ccgaggagtt tcttgttgga gaaagaaaaa gagaacttat tgtctttgtt tccagctaga
                                                                     3360
ggcgacttct ctagcttctg ctcctcttcc atcttcagta aggagtcagg tttgctgttc
                                                                     3420
ttgtacttcc acttggcctc tgacttgctc ttggtttgct ctcgaatttc cagcctctcc
                                                                     3480
acatcattet geatgtgaae cacatetttg ttgggcaeae teaggaeaet etttqtqqee
                                                                     3540
ttgcccttct tgggcggctc catcttggtc agtgcctcct tggtgtgggc ttcgagcagg
                                                                     3600
tccaggttgg ggatggtggg tgaggctgac tcccgggact tcttcccttt cttcttgcct
                                                                     3660
ccatctttga gcttcagcgt tttggggggc cttgggggct tagggggctt cgggggcttg
                                                                     3720
gggattttgg atggcttggg catcttcaca gttttgggag tcttttttt ggacactttc
                                                                     3780
tecaggaggg attgaggegg ggtggeetea atgggagaeg ggggeteete etteteeegg
                                                                     3840
teccegteae acaceteate tgaegaggeg acagtattea etteeggteg gaeggetttg
                                                                     3900
gaggeattet cactgageeg gatetetttg gecaggtett tgattagetg tgaaggtttg
                                                                     3960
aagtgeteeg ggagetegte eteatgetet gecaaageet gettettegt eeaegategg
                                                                     4020
aaagcaccat tgagaatttt agctccttgg actagatgag ggggcagctg cttcccagat
                                                                     4080
ttgtgagage ctttgaatge ctccagcagg tgcttcccca tgtaccagca cgcagtttca
                                                                     4140
aagttgggaa actgagtcag gctgcccagt ttcaacctcc tttccacttc atatgctctc
                                                                     4200
atctgcatct ccacactcag gctgtggagg aaatgtcccg cgaaggccag gcagtccaca
                                                                     4260
ggggtgagtg tggcgtagat ccagcctgag gggatgaaga gggtctggcc ctgcttgacg
                                                                     4320
atgcacttgt agcatttgtc gacctggtca gcaaagaaca tctcgctgtg gttagaggca
                                                                     4380
gaccgccage geteatacag ggagatgttg geegaggeeg geetgatgag atagaaggte
                                                                     4440
ttetececet tgageacgtg gtaceaggea gaggegeeee cagagtegat gtggaagteg
                                                                     4500
gtgtaactgt ccttcacgca gattaggcag tacttggtca ctttgggctt ggccagcaat
                                                                     4560
geateatetg gecagtagtt ttetacecat gacagtttet ttacaatgte aggtggetee
                                                                     4620
acgaagetgg acattegggt gteagagaae tegaggttgg tgaegttgag gaeeegettg
                                                                     4680
cggttggtgc tgtagtaata gtc
                                                                     4703
```

```
<210> 5387
<211> 803
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(491)
<223> similar to gi2808660 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5387
acctcatcct ttctgaggac caaagatgtg taaggcttgg agacagacgg cagcctgtac 60
ctgacaaccc ccagagattt gatttcgttg tcagcatcct aggctctgag tacttcacga 120
ctggctgcca ctactgggag gtgtatgtgg gagacaagac caaatggatt cttggagtat 180
gtagtgagtc agtgagcagg aaggggaagg ttactgcctc acctgccaat ggacactggc 240
ttctgcgaca gagtcgtggg aatgagtatg aagctctcac atcccgcag acctccttcc 300
gccttaaaga gcctccacgg tgtgtgggga ttttcctgga ctatgaagca ggagtcatct 360
ctttctacaa tgtgaccaac aagtcccaca tctttacttt cacccacaat ttctctggcc 420
```

```
ccettegece titetitgaa ecitgeette atgatggagg aaaaaacaca geacetetag 480 teatitgite agaactacae aaateagagg aateaatigt eeceaggeea gaagggaaag 540 gecatgetaa tggagatgig teeeteaagg tgaactette titactacee eegaaggeee 600 cagagetgaa ggatataate etgteetige eecetgacet tggeecagee etteaggage 660 teaaggetee titetititag ggatatgeea cattacetge teeeateace ateeageea 720 geaceetggg acticagteg eetggeecaa eeceatgati atggaacgte taateaaati 780 aaeceaaate eagaceetg att
```

```
<210> 5388
<211> 1280
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(629)
<223> similar to gi5081459 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5388 cctatgagga aatgtcactt tatcatcagc cagcaaatag gaagagacct atcatcttga 60 ttggtccaca gaactgtggc cagaatgaat tgcgtcagag gctcatgaac aaaqaaaagg 120 accgctttgc atctgcagtt cctcatacaa cccggagtag gcgagaccaa gaagtagccg 180 gtagagatta ccactttgtt tcgcggcaag cattcgaggc agacatagca gctggaaagt 240 tcattgagca tggtgaattt gagaagaatt tgtatggaac tagcatagat tctgtacggc 300 aagtgatcaa ctctggcaaa atatgtcttt taagtcttcg tacacagtca ttgaagactc 360 tccggaattc agatttgaaa ccatatatta tcttcattgc accccttca caagaaagac 420 ttcgggcatt attggccaaa gaaggcaaga atccaaagcc tgaagagttg agagaaatca 480 ttgagaagac aagagagatg gagcagaaca atggccacta ctttgatacg gcaattgtga 540 attccgatct tgataaagcc tatcaggaat tgcttaggtt aattaacaaa cttgatactg 600 aacctcagtg ggtaccatcc acttggctga ggtgaaagaa acatccattc tgtggcatgt 660 tggacttgat ctggcaaaaa ctgccaatag gaggactgcc cgacactgca gcaagattga 720 ggataagatg gaaggcagca gtataagctg tagatctgtt cttagatctc ttgaattagt 780 gagacgacag ttcccttagg cagtttgtgc atggcatcct ttattctcta tacatqqctt 840 tagcggttct tgcctcattt tgggattcta aatggaagct ttcaacaqaq cattccattt 900 tgtcctgtta aaaccttttg ttttcaccta aaccctttct gcttagttgt atctctgtga 960 aaaacttgta tacacaageg tecatgtete acacaaatat tgatgtgatt attettaagt 1020 gttaaatcat taacacttaa atgacttcat tgggaatatt gagcaqaqqq actqtqcttc 1080 tatgcactgg gcaaggcagt atttgcttag gaaactaatt tagtcatcag agatactttc 1140 ctaaaaagga aaaataaaaa acaaaatggt gccactttgg gttgaagcta cttttgttag 1200 gettgaatte atttatatgt ettttgatte ttaaaaaaae aaaaaacatt eeattagaag 1260 caccagtttt tttggctcag 1280

<210> 5389 <211> 543

<212> DNA

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (544)...(46)

<223> similar to gi2772539 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5389
gctgcaaagt gaggaggccc ggggtctcca ttgtacatgg gtctatttga cagtgacctt
                                                                       60
actotggaaa taatgatatt cottoagtot gaggtaattg atgttgatga aaccggtggo
                                                                      120
ategattggc tcataattcc cctgcacgtt gacgctcacc agctcctcct tgtagagaga
                                                                      180
gagtagagac teetggetga ggatgtgeac etggeeettg aagatgggea eetgeacttt
                                                                      240
teetteeatt tgeteetggg aettggtgat geaatggtgg acagatttae aeteagggtt
                                                                      300
gattttgtgc acttcccgat ccatagtgaa gtcctcgatg tctaaatcag cctgttgaag
                                                                      360
gatggtgcct gctggggtct tgtagatacc tctggacttt attctaatga agcagttctc
                                                                      420
cataatgtca atacagecca tgeegtgett geeegtgaet tegtteaggt acaegaagag
                                                                      480
ctccaaggag gtctggtgag gtggtgccat cttgatggtc actttcacgg ggaccccttt
                                                                      540
ttt
                                                                      543
```

```
<210> 5390
<211> 388
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (14)...(339)
<223> similar to gi5360111 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5390

ctgggagaga taggaagacg tggatcaaaa tgctcatgat ttggaggcca aagtggcgag 60

cctgagagga atggagttac aggggtgcgc caccactcag gttgaattac aagataaccg 120

agaagaacag aaacaggtgc gcttaccaca aagccgcctg acaccatggg aggtgcggtt 180

tattggcaaa gaaaagaac aacgtgaccg ggtgcgactg agagctctac aggaattaag 240

tcgaccacta caaaaacgaa ctgaaatgga agaatgtgaa aaaagaaaga taattgctga 300

agaaaagcac aaggaatggc ttcagaacaa gattgagtcc aaaagaatag aaaggaact 360

ggaaagttat atagaaatgg gggtacaa
```

```
<210> 5391
<211> 1222
<212> DNA
```

```
<223> similar to gi415907 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5391
ttgctttgtc atctgaacca caaactgtac ttcttttgcc tccctatgaa aatgqcttct
                                                                       60
gecagtagea tttteteeag teatecaeag gtgaagaeaa ggaaattete tateetgagg
                                                                      120
ccccttttc cacataatcc cacccaatg caaactattt cctgcaaaca gataccttca
                                                                      180
gactgtttcc cccttcatca taacgacccc agacctagaa atcccagttt aggcctcagt
                                                                      240
tgaaacatto etectaceta taaaaactae eegtatggge eteattteet cateecaeta
                                                                      300
ggggtctgcc cttcctaaat caaaagcaag tagaagacag agtaaaatgt gtaatataaa
                                                                      360
tttattctgg gacattttcc tcattgaaga tattttaaca tagattaaaa tacatcaata
                                                                      420
tttcatgaaa aataaattct agaagaattt aaataatatc tgtaatgtac atgatttgac
                                                                      480
cctgaatatc ctttttttt tcacttcaaa catcattttt taaaaagtaa cataaaatga
                                                                      540
taaggactge aacattette atatatettg tgteteataa attttaatte aactgeeegt
                                                                      600
tettttetea aetatgtatg ttaatggtat ttgeteetgt ttttgaatag gaagagtate
                                                                      660
cattttctgt ttcttcgtga tatttaggtc ttctttctct gattcttcaa qaaaatqctt
                                                                      720
cgtgctgagt ttgaatagta atcgagggtc tggattagac agtggtggac aattacacat
                                                                      780
ctctctaatt ttgagagcct gaggtataag tctatccaag tactcaactc gattgccatg
                                                                      840
agaagggtgt gtagataacc attctggcat cttgggttgg ccatgcaggc tatcaacgaa
                                                                      900
ctccatttgc tgccaaaaca ctgaactggc tcttatgtct gcacaagcct ttgcagcaag
                                                                      960
cagtagtcca attitigtcag cttcggcctc caattitictg ctgtatggtc tattaaacat
                                                                     1020
atactectge aatttägaet gtatecaetg geacaaaagt geeaagetat etegaggaea
                                                                     1080
aatggcccaa atcattgtga ggaaaatcat acctaggaaa tccaacaaat gaaccatgcc
                                                                     1140
agcettteet tetgggeeat gaaatageae atgeagtaet tgggeatget geagaaggaa
                                                                     1200
agaaagttga tgaatatcgg tt
                                                                     1222
     <210> 5392
     <211> 2038
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (20)...(1179)
     <223> similar to gi3882333 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5392
gggccgacca gcccggtgga attcctctgt caaagccaag cttacagtaa atatgcttcc
                                                                       60
ctcattcacc aagaccccca tggatctcac catccgagct ggggccatgg cacgcttgga
                                                                      120
gtgtgctgct gtggggcacc cagccccca gatagcctgg cagaaggatg ggggcacaga
                                                                      180
cttcccagct gcacgggaga gacgcatgca tgtgatgccc gaggatgacg tgttctttat
                                                                      240
```

<213> Homo sapiens

<221> misc_feature <222> (1047)...(755)

<220>

```
cgtggatgtg aagatagagg acattggggt atacagctgc acagctcaga acagtgcagg
                                                                      300
aagtatttca gcaaatgcaa ctctgactgt cctagaaaca ccatcatttt tgcggccact
                                                                      360
gttggaccga actgtaacca agggagaaac agccgtccta cagtgcattg ctggaggaag
                                                                      420
ccctcccct aaactgaact ggaccaaaga tgatagccca ttggtggtaa ccgagaggca
                                                                      480
cttttttgca gcaggcaatc agcttctgat tattgtggac tcagatgtca gtgatgctgg
                                                                      540
gaaatacaca tgtgagatgt ctaacaccct tggcactgag agaggaaacg tgcgcctcag
                                                                      600
tgtgatcccc actccaacct gcgactcccc tcagatgaca gccccatcgt tagacgatga
                                                                      660
cggatgggcc actgtgggtg tcgtgatcat agccgtggtt tgctgtgtgg tgggcacgtc
                                                                      720
actcatgtgg gtggtcatca tataccacac aaggcggagg aatgaagatt gcagcattac
                                                                      780
                                                                      840
caacacagat gagaccaact tgccagcaga tattcctagt tatttgtcat ctcagggaac
gttagctgac aggcaggatg ggtacgtgtc ttcagaaagt ggaagccacc accagtttgt
                                                                      900
cacatettea ggtgetggat ttttettace acaacatgac agtagtggga cetgecatat
                                                                      960
tgacaatagc agtgaagctg atgtggaagc tgccacagat ctgttccttt qtccgttttt
                                                                     1020
gggatccaca ggccctatgt atttgaaggg aaatgtgtat ggctcagatc cttttgaaac
                                                                     1080
atatcataca ggttgcagtc ctgacccaag aacagtttta atggaccact atgagcccag
                                                                     1140
ttacataaag aaaaaggagt getacecatg tteteateet teagaagaat eetgegaaeg
                                                                     1200
gagetteagt aatatategt ggeetteaca tgtgaggaag etaettaaca etagttaete
                                                                     1260
tcacaatgaa ggacctggaa tgaaaaatct gtgtctaaac aagtcctctt tagattttag
                                                                     1320
tgcaaatcca gagccagcgt cggttgcctc gagtaattct ttcatgggta cctttggaaa
                                                                     1380
ageteteagg agaceteace tagatgeeta tteaagettt ggacageeat cagattgtea
                                                                     1440
gccaagagcc ttttatttga aagctcattc ttccccagac ttggactctg ggtcagagga
                                                                     1500
agatgggaaa gaaaggacag attittcagga agaaaatcac attigtacci itaaacagac
                                                                     1560
tttagaaaac tacaggactc caaattttca gtcttatgac ttggacacat agactgaatg
                                                                     1620
agaccaaagg aaaagcttaa catactacct caagtgaact tttatttaaa agagagagaa
                                                                     1680
tettatgitt titaaatgga gitatgaatt tiaaaaggat aaaaatgett tatttataca
                                                                     1740
gatgaaccaa aattacaaaa agttatgaaa atttttatac tgggaatgat gctcatataa
                                                                     1800.
gaatacettt ttaaactatt ttttaacttt gttttatgca aaaaagtate ttacgtaaat
                                                                     1860 t
taatgatata aatcatgatt attttatgta tttttataat gccagatttc tttttatgga
                                                                     1920
aaatgagtta ctaaagcatt ttaaataata cetgeettgt accatttttt aaatagaagt
                                                                     1980
tacttcatta tattttgcac attatattta ataaaatgtg tcaatttgaa aaaaaaaa
                                                                     2038
```

```
<210> 5393
<211> 998
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (914)...(168)
<223> similar to gill09828 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5393
tattattagg tcagaacgaa tgaagtagca gcaaaagggt ctctcctatg atctgtctt 60
cactggtcct cagggcaagg aggaaacttg ggcaggagat gattgctcaa tcccagcaga 120
ctctcagaat ctcacttgga cccgaaagtg catctgcttg gtggcattgt tcttcattcc 180
tgtcttcagc atccattttg atttcatcct ttggacatac tgcatgtctc gctctcgcat 240
aagagccgct cctgtgctgc cagtccatcc cagggctctg tactgctgaa gtactcggcc 300
cacggccttc cgatttttgg caactgccac agctcttgac aagccaaatc gctgtttgta 360
gtatctcatc aaggagcgat gacccactct ggcaccagaa ggcagaatca attccatggt 420
```

```
ttcatcatca tattccaagt tettttetga gggcaactee teageettat tggggteete
                                                                      480
cccttccttg tgatctggat agctactcct aaaatcatag aagtctgcaa attccaaagc
                                                                      540
agcategeca tetgtgaaga gettacagtg gettttgtca tteatatgtg eetgtacage
                                                                      600
ttctgtggag tagaaggact tccctttctc gttgcaccac aagcaaatct tgccaacacc
                                                                      660
aactttctct cccaagtatt taatcagtcc cttaatatct gaaagatatt ctatatcagg
                                                                      720
aataaagaaa ctgtggtctt tggtcatgtg agccacattc ttcatcagcg agctggaatg
                                                                      780
atgggaacaa aataagcagt ccgtgatagg gatggcacca aggggtgggc cttcctcagc
                                                                      840
etetteetee tetgeateet geteeaeeae ategteeatt getteagtat eeteaeatte
                                                                      900
caattettea teagaateaa tatetteeea ategteteea teeaggteet etteeteete
                                                                      960
ctégetgtec tecteetget getttgéeaa ettetteg
                                                                      998
```

<400> 5394 gggaaaggtc caactggccc accttcaaca ctccctctaa gcacccagac ctctagtggc 60 agetecacee tatecaagaa gaggeeteet eeeccaceae eeggacacaa gagaaceeta 120 teegaceete ceageceact aceteatggg ceeceaaaca aaggegeagt teettggggt 180 aacgatgggg gtccatcctc ttcaagtaag actacaaaca agtttgaggg actatcccag 240 cagtegagea ceagttetge aaagaetgee ettggeeeaa gagttettee taaactaeet 300 cagaaagtgg cactaaggaa aacagatcat ctctccctag acaaagccac catcccgccc 360 gaaatettte agaaateate acagttggea gagttgeeae aaaageeaee acetggagae 420 ctgcccccaa agcccacaga actggccccc aagccccaaa ttggagattt gccgcctaag 480 ccaggagaac tgcccccaa accacagctg ggggacctgc cacccaaacc ccaactctca 540 gacttacete ceaaaceaca gatgaaggae etgeeceeca aaceacaget gggagaeetg 600 ctagcaaaat cccagactgg agatgtctca cccaaggctc agcaaccctc tgaggtcaca 660 ctgaagtcac acccattgga tctatcccca aatgtgcagt ccagagacgc catccaaaag 720 caagcatetg aagacteeaa egaceteaeg cetaetetge cagagaegee egtaecaetg 780 cccagaaaaa tcaatacggg gaaaaataaa gtgaggcgag tgaagaccat ttatgactgc 840 caggcagaca acgatgacga gctcacattc atcgagggag aagtgattat cqtcacaqqq 900 gaagaggacc aggagtggtg gattggccac atcgaaggac agcctgaaag gaagggggtc 960 tttccagtgt cctttgttca tatcctgtct gactagcaaa acgcagaacc ttaagattgt 1020 ccacatcett catgeaagae tgetgeette atgtaaceet gggeacagtg tgtatatage 1080 tgctgttaca gagtaagaaa ctcatggaag ggccacctca ggagggggat ataatgtgtg 1140 ttgtaaatat cetgtggttt tetgeettea eeagtätgag ggtageeteg gaeeeggege 1200 gccttactgg tttgccaaag ccatccttgg catctagcac ttacatctct ctatgctgtt 1260 ctacaagcaa acaaacaaaa ataggagtat aggaactgct ggctttgcaa atagaagtgg 1320 tetecageaa eegitgaaag geatagaatt gaetetgite etaacaatge agtattetea 1380 attgtgttac tgaaaatgca acattagcaa agaggtgggt tctgttttcc aggtgaaact 1440 tttagctcca tgacagacca gcctgtagtt atctgtgtac acagtttaca gctacaaaaa 1500 cctactttgg tatttattac agaaaagtgc tcagttaaat gtaagtgtta ttccttcagc 1560 aaaatattca ctgacccaaa actctttatg gcattttaca atgcacacag cctcatgcaa 1620

```
gtttagacaa gtggatttat actgtcttat gagtgcccgc ccctgatata ttacctcatt
                                                                     1680
atgcaaaaat aacatatctt tcatgactat tttgacaaaa gtttaaaaaca catatgaagt
                                                                     1740
tcaaatttca ggaaccaagg actgccagaa aatattagcc tctacattac gcatgcattt
                                                                     1800
aqaaqcttac ctgaaatctq ccttttataa aggaatagta tggataagtg gaattgtaca
                                                                     1860
ttttttaaac ttgattgcca ttaaagcaga aattataagg ttgcaacaat atttgtttct
                                                                     1920
aatcactggc tttctcaaga gtatggattg acatattgtg ttatgaatgc acatctctca
                                                                     1980
gatgtgttga agcatccatt gcatccattt tttattattt tcttagtttt gttcttggac
                                                                     2040
aaatttaaac ttttaaaaga ttattcaaga tgaatttaaa agtcaaccct tcacacaqtt
                                                                     2100
tecetactgt atgtagaate caggtgetga aaccaagtgt ttetttteee atgetetttg
                                                                     2160
                                                                     2220
ttaaacccca attatagata atttttccag tcttaagctc tgtccacctt caagtcaatt
cataaccaag tttttgaacg ctgctatgaa ttgcactgtg aaaagcactc ttccctctca
                                                                     2280
gttttctttt catcccagcc atgtttatca gatccttaag aacattgtat ttcagtcttt
                                                                     2340
tacatcagtc tgaattttgg aaaagaatgc aatagttgta ctccacagtc agtggaactg
                                                                     2400
ttccctgagt ccgaqqctca tgtgtcattc tggcactaca tttgcttaaa ttgctatttt
                                                                     2460
ggcaacagca cagaaaacta atatttttaa gcagagaatc ttggcaatga gtgagagatg
                                                                     2520
ttaatttcac agaagcacaa ctcccaaccc aacccttagg aaaagccctc ttccatcgtt
                                                                     2580
acagtgetea gtgaatatta atttagttet gettaagtgg ttgetataca aactttgaat
                                                                     2640
agccacctaa taaataaacc ttgcatgaca aacctgcaaa atattttatc agctgttatt
                                                                     2700
ggaaagtgat tttaagcaat tgcttcctca gtgtcagggc acatgtgaat ttccacacca
                                                                     2760
aacagagcat gaggaaccag ttgacatgct gggttgtgac tggcagcttt agcagcctca
                                                                     2820
gtactgaagc cacaccagtg tccggatgga agtctgcatc tgaggttgct cagtgtcccg
                                                                     2880
gtcattcatt tacacatttt aacttgcatt aaagagctgt tcttttctgt ggcctagact
                                                                     2940
cttttcactg atctcaaaat aaactggttt ttttcaaaaa aaaaa
                                                                     2985
```

```
<210> 5395
<211> 1268
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (725)...(492)
<223> similar to gi4589624 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5395
gccaggaaga gatacttaag agttgatata tacactaaga aagatgaaaa gatccagcca
                                                                       60
tacaactatc taaggaaaga tattctcttt ctatgggcac aagaagcaca caaaacaaca
                                                                      120
ggtctcagtg tattgtaaac accatcaaag acctccacac cattaggctt ataatctcac
                                                                      180
aagcattetg cetttgteag acaetteaca gggtgeaact gggttaettt tgeaggeaaa
                                                                      240
geggagattt tgatttetgt tgtaaaaage ceaacagaga gaaateggag gettteteat
                                                                      300
ctctgaccca tcagtccaat tcttttgtcg tcctttatgg aagtcttttc tctqttgcag
                                                                      360
ccactttcag taattgcaaa aggaaagaaa aagtgtctcc cacaatcctt ctctgggagt
                                                                      420
tcatgttttt ttgctacttg tcttctgttt ctgtttgcga aggtgagcct ctatctcgtg
                                                                      480
cctgaacacc agcatgccca gctggccgtg ggatgcctcg ttcatggcct tggactgcat
                                                                      540
geacatettg tactgetegg gggteagete gtecatgeag egetteteat gecagaggtg
                                                                      600
gaagagteet egeacaggeg teegtaceae tatgaggttg etgtggagat aettgegata
                                                                      660
aaggtgcaca teeteteege eecageettt gatgteeaga teaaaeecae etgtegggae
                                                                      720
agaacacact gttgaatcac actgcactga tctgttttgc ttccctgagt tgcaacaagc
                                                                      780
acaaactttt cattaagaca tgactggggg ggatgcgtgc ttcaccacca cccctccaaq
                                                                      840
```

```
gtacqaqaqt qtccacctgg gtcaqaagcc ccgagaattc cccaacaaaq acgactttta
                                                                      900
tggcagacag caccgacttc ttcagatgac aggacctcca agaaaattcc aagcatttgc
                                                                      960
ctgcattcaa qagttatcag caatgctaat gaacagcccc agcctcgtgg ttaatgggta
                                                                     1020
caaaaataag atctagtatt cggtagcatt attactgaca gacttattgt gattatgaat
                                                                     1080
tagctattqt taacaattta ttgtatattt aaaaatagct agaagactga taaatatqat
                                                                     1140
aaataattga aatgatggat acctcccatg accctgatgt gatgattaca cattgtatgc
                                                                     1200
ctgtatcaaa acatcacatg taccccataa acatgcgcat aataattaaa aatagaggtt
                                                                     1260
tcqtaaaa
                                                                     1268
```

```
<210> 5396
<211> 1222
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1210)...(447)

<223> similar to gi3786433 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5396
tttttttttgg gagtactttc acgtttaata cgcaagggca taaaatagaa tqttaqqaaa
                                                                       60
caatttggat ttttttccct aaaatatagg tgactatqqq ctaqtttaca actttccttc
                                                                      120
tctcactgaa ataaaaatac atagttaagg attagggacg aatacataac aggtgacatt
                                                                      180
tgacagtttg ggcatattcc ttgttacttt ctaatcttga gaatcacagt ttgctgtttt
                                                                      240
aggaggtatc tgaggaggtt ccagataaaa ggcgatggcc taaatgctct taaactttga
                                                                      300
gcgtgcctgg atgctctaaa gtaggagagg aatttataac agaagcttac aatgaagaac
                                                                      360
cagacattcc gagccatctg agatcttgca atgagaaggc gccaggcgat aaggaagagg
                                                                      420
gcagtattaa agaggtagtg aatatttegg ageettttta agegttgett tgettttggg
                                                                      480
atcccagcca tatcctcttt caataagtat tttttaactc ccaaaacata attttcaatq
                                                                      540
tattccaacc agttcaactg gcgcacgtca aagttgaata ctctctggtc ttcaggactc
                                                                      600
ageteagaca teageattte tgtattgtae gtgeteeatt eceaaeteeg gttgatgaaa
                                                                      660
tactccaaca tggaaacagt tettaaaage egatteatga getttgteat eetgggette
                                                                      720
cttccagtga gccgcagata gcagtcatag ataatggcag gggcccggtg gctgaccgca
                                                                      780
ttccagtact gtgatgtgaa gctgttgctg gtaaaattag catttggcct cctgaaaggt
                                                                      840
ctctcaaatg ggattttttc aaaggttgcc aagacttgga ctcccatttt qtqccaattq
                                                                      900
cagggattca tgttaccaga tgtaatgtgg tagactaatg ttgacttagg tctgtgaact
                                                                      960
geagtatace atectacage tageatgaga ttgacgaetg tateaactgg aattacgtet
                                                                     1020
gccacagcca ttggagtagc ttttatggcc cgaagaaacc ctttcccagt cgcaataatg
                                                                     1080
attecattag greeatttat attateaace caacetggga aaggeteetg ceaagttget
                                                                     1140
cccacaatgg agggccttat gatggcaatg ttcaggttcc tgctctcttg ctgcaccacc
                                                                     1200
atttctcccc atgtgccgaa tt
                                                                     1222
```

```
<210> 5397
<211> 399
<212> DNA
```

<213> Homo sapiens

<220>

<221> misc feature

<222> (402)...(288)

<223> similar to gi4929667 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5397

ggaaactttt tcagtattgc tcttctcttc tctctcacat tttccatgat tgacatctgg 60
taaccacaga ggtatcccga gtgaaggtgg ccctggcctg cagcagctct gctcttttt 120
ttcccctact ttcctaaact ttattaaaga aaaaagcact agaacatagt cacttttctg 180
ggattcctcc ccgcaaaatg tgacgtttga ttttcaaaca tgccagaagt ggacatggtt 240
cccagttgta ctaaataggt gagaagctga agtcctaaag tgttcatctt ccaacttttc 300
ccagtctgtg gtctgtcctt ggatcagtaa taattgtctg aacagctact atggctcat 360
taatttttgg ctggagctct ctgagctctt ctatatgcg 399

<210> 5398

<211> 2951

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)...(2954)

<223> similar to gil510155 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5398 atctcactga ggaccaacct ttcgacattc ttcagaaatc cttgcaagag gccaatatca / 60 ctgaacagac attggcagaa gaggcatatt tggatgccag tataggttca agccaacagt 120 ttgcacaage teagetteat cettetteat cageateett tacteagget tetaatgttt 180 ctaattactc aggtcagacg ctgcagccta taggggtgac gcatgtgcct gttggagcat 240 cgtttgcaag caatacagtg ggtgtacaac atggctttat gcaacatqtq qqqatcaqtq 300 ttcccagcca gcatttgtct aatagcagtc agattagtgg ttctggtcaa atacagttaa 360 ttgggtcatt tggtaatcat ccttccatga tgactattaa taacctagat ggatctcaaa 420 tcatattaaa gggcagcggg cagcaagccc catcaaatgt gagtggaggg ctcctggttc 480 atagacagae teetaatgge aacteettgt ttgggaacte tagtteeagt ceagtageae 540 agcctgttac cgttccattt aacagcacaa attttcaaac atctttacct gtgcataaca 600 tcatcataca aaggggtctt gcaccaaatt caaataaagt cccaattaat atacagccaa 660 ageetateea gatgggteag caaaataeat acaatgtgaa caatttggga atteageage 720 accacgtaca acaagggatc tettttgett etgcaagete accecaggge teagtagttg 780 gtccacacat gtctgtgaac attgtaaacc aacagaacac aagaaagcca gtcacctcac 840 aggcagtgag cagcactggg ggcagtattg ttattcattc ccccatgggc caacctcacg 900 caccccaaag tcagttcctt atacctacaa gcctttctgt cagttccaac tcggtacacc 960 acgtccagac tataaatggg caacttette aaactcaacc etetcagete atttetggee 1020 aagtggcctc agagcatgtc atgttgaaca gaaactcttc caacatqctc aqqaccaacc 1080

```
1140
aaccatatac tggaccgatg cttaacaacc agaatactgc tgtccactta gtgtctgggc
agacatttgc tgcctctgga agtccagtga tagccaatca tgcctctcct cagcttgtgg
                                                                     1200
gtggacagat gcccttgcag caggcatccc caactgtatt acacctgtca cctgggcaga
                                                                     1260
                                                                     1320
geagegitte ceaaggaaga cetggetteg ceaceatgee ateggigaea ageatgicag
gacctagtcg gttccctgct gtcagctcag ccagcactgc ccatcctagt cttgggtctg
                                                                     1380
cagttcagtc tggttcatca ggatcaaact ttacaggaga tcagctgacc cagccaaaca
                                                                     1440
ggactecagt accagteagt gtgteteate gtettecagt ttettettee aagtetacea
                                                                     1500
gcaccttcag taacacacct ggaacaggaa cccagcaaca attettetge caggetcaga
                                                                     1560
                                                                     1620
aaaaatgtet gaateagaet teececattt etgeteecaa gaccacagae ggeetgagge
aagcacagat ccctgggctc ttgagcacca cactgccagg gcaggattct ggaagcaaag
                                                                     1680
ttatatccgc atccttagga accgcacaac cacagcagga aaaagtagtt ggatcatctc
                                                                     1740
etggecatee agetgtgeag gtggagagte attegggagg acaaaaaagg cetgetgega
                                                                     1800
                                                                     1860
aacagetaac gaaaggaget tteattetee ageagttgea gagggaceaa geecacaetg
tgacaccaga caaaagtcac ttccgatcac taagtgatgc ggtacagaga ctgctctcct
                                                                     1920.
accacgtgtg ccagggctcc atgcccactg aagaagactt gagaaaagtg gacaatgaat
                                                                     1980
                                                                     2040
ttgagacagt tgccactcag ctcctaaaaa ggacccaagc tatgcttaac aaatacagat
                                                                     2100
geotgetect agaagatgee atgegaatea atececetge tgagatggtg atgateqata
ggatgttcaa ccaggaggaa agagettccc tgtcccgaga caagcgtttg gcacttgtag
                                                                     2160
accetgaggg ttttcagget gatttctgtt gttccttcaa acttgataaa getgetcatg
                                                                     2220
agacacagtt tggccggagt gaccagcatg gcagtaaagc aagcagctct ctgcaaccgc
                                                                     2280
cagecaagge ccaaggeaga gacegageea aaaceggtgt gacggaacee atgaateatg
                                                                     2340
accagtttca tctagtgcct aatcacatcg tggtctctgc agaaggaaac atttctaaaa
                                                                     2400
aaacagaatg ccttggcaga gcactgaaat ttgacaaagt gggcttagtg cagtaccaga
                                                                     2460
gcacgtctga agagaaggcc agccggagag agcctctgaa ggccagtcag tgctctcccg
                                                                     2520
gccctgaggg gcaccggaaa acctcatcca gatcggatca tggtactgag agcaaactgt
                                                                     2580
                                                                     2640
caagcateet ageagatteg caettggaga tgacgtgtaa caatteette caggacaaaa
gtctgaggaa ttctccaaag aatgaagttt tacacacaga catcatgaaa gggtcaggeg
                                                                     2700
aaccccagcc agatctccag ctgacaaaga gcttggaaac cacatttaag aacatcttgg
                                                                     2760
aactcaaaaa ggcgggacgg cagccccaga gtgaccccac ggttagcggc tctgttgagt
                                                                     2820
                                                                     2880
tagatttece caacttttet cetatggett cacaggaaaa etgeetggaa aagtteatee
                                                                     2940
cggaccacag tgaaggtgtt gtagaaactg actccatttt agaagcagct gtaaatagta
tcctagagtg t
                                                                     2951
```

```
<210> 5399
<211> 1450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1232)...(793)

<223> similar to gi5737842 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5399
tttttttaa agtgaaaaag aatttatta aggttttgtt atatcaggac aacaaaccag 60
cccttttatg tcaccactca tttaaaaggc cattccaaaa cattaccatt aatgtagtag 120
cccatgttt ctttcaggca ttttcaaagg gcatctcaga cccacaatat tttctattga 180
gtgtgcagaa aaacagagct gcaaaatcat tagtaaggca aaataataaa atgtctccct 240
ttttattgaa acatcaattt tccatgtttt agagatattc tgaatttaac attcatagat 300
```

```
atgcaatatt taagttttag gatattagca tactatcagc aatattgggt ttaatagcta
                                                                      360
ctatcaagca actgatttct aatgcacaca acataatttg atagtatatg tataagaaga
                                                                      420
tggcctgaat tttgccctca aatgcacaaa aagaattttc catacacatt ctcaaaagtc
                                                                      480
tttggccttg ctgaataata atagagctgt tattttactg tgaagcaaaa taagccttca
                                                                      540
agtgtccctt acttgatctt agaaggtcaa attctctgtc caatagttcc tcttctgtta
                                                                      600
acttagagaa attateetet eeaaaaggat teeaeeetga eatateaggt ggattgetga
                                                                      660
tgttcttctg atttgtgaaa tttgcaatgg cctctttatc agcaactgac ctattggcac
                                                                      720
tataggagga gtccattatg gttccaacct gagctggaag tgatgaagtg taggaaacta
                                                                      780
                                                                      840
aggetggtga gaactettga ggggaggtaa gatatteagg tgatgeetgt tgttgagaeg
gctgatgttg agctagcatc tgctgttgaa agaaagcctg ctgatactgc ggcatcattg
                                                                      900
taggatactg tgatgcagaa ggttgtggtt gatataccga atgcattaaa aattgttgtt
                                                                      960
gaagcatctg ttgctgctgt gttgcatgtt gatactgctg catataagca tcttgaagta
                                                                     1020
ggtggtggtg gtggtggtgg tggtgctgct gctgctgctg ctgctgctgc tgttgctgtt
                                                                     1080
getgetgetg etgttgetgt tgetgetget getgetgetg etgetggtga ggatgaegat
                                                                     1140
gctgtaaatg gagttgctgt aatctccaat ctccctgctg tagttgctgg agtactctat
                                                                     1200
gctgctgtgg cggctgctga ggaggtccct gacccaataa aatttcaggg ccatttccag
                                                                     1260
gtcttagtgc cccttttggt ctatggttac cgaattcacc aggagcaaqg actttaacaq
                                                                     1320
gtgttgctga actttgaatg gtcagcacac tgggagtggc agtagtagca qaqttqqcct
                                                                     1380
ttggtctttg tcttggtgca attgaggtat atgttggtca aatggtatct gttattctgg
                                                                     1440
cttttatttg
                                                                     1450
```

```
<210> 5400
<211> 5931
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1155)
<223> similar to gi1665787 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5400
ccaactcctg gagtcccctg ggagctgccg ctgcaggccc ccgagccgct aggccccgcc
                                                                   60
gccaggccac cgctgctgcg gcagccatgg cggaagttca tagacgtcag catgctcggg
                                                                  120
ttaaaggaga agccccgcg aaatcctcca cactccgaga tgaggaggag ctggggatgg
                                                                  180
cgtcggccga aacgctgacc gtgtttctga agctgctggc cgccggcttt tacggcgtga
                                                                  240
gctccttcct gatcgtggtg gtgaataaga gcgtgctcac caattacaqa tttccctcct
                                                                  300
cactatgtgt tggacttggc cagatggtgg ccacagtggc agttctctgg gtgggaaagg
                                                                  360
egeteagagt agteaagttt cetgacettg acagaaatgt acetegaaag aegtttecae
                                                                  420
tacctctact atattttggg aaccaaatca cgggactgtt cagcacaaag aaactgaact
                                                                  480
tgccaatgtt tacagttctg agaaggttct ccatcctgtt tacaatgttt gctgaaggag
                                                                  540
ttttactcaa gaagactttt tcttggggta ttaaaatgac tgtatttgca atgattattg
                                                                  600
gageetttgt agetgeeage tetgaettgg eatttgatet ggaaggatat gettttatte
                                                                  660
tgataaacga tgtcctaaca gcagcaaatg gtgcatacgt aaaacaaaaa ttagattcaa
                                                                  720
aagagctggg aaaatatgga ctgctctatt acaatgcact gttcatgatt ctgcccaccc
                                                                  780
840
acaccctctt tettetgeag tteaccctct cetgtgtgat ggggtttate ttaatgtacg
                                                                  900
ccacagtact ctgcacgcag tataattctg ctcttacaac tacaatagtt ggctgtatta
                                                                  960
agaatatatt aataacttat attggaatgg totttggtgg agattatatt ttcacqtqqa
                                                                 1020
```

```
caaacttcat tggtttaaat atcagcattg ctgggagcct ggtatattcc tatatcactt
                                                                     1080
tcactgaaga gcagctgagc aaacagtcag aggctaataa caagctggac attaagggga
                                                                     1140
aaggagcagt gtgaccagag gattgcttca tctgatacgt aggcctaagt ttttaatcaa
                                                                     1200
ctcagaacac tggcagttcc tacagagaca ctgaggtgtc ttgattatgg aggaaataac
                                                                     1260
cattcctttg cacttgtaca atctgaggat tgattgctgc cttttaaaaat tttatgaaga
                                                                     1320
gagaaactta taattgactc tattttaaat atgttgtttg aattaattta tatcagactg
                                                                     1380
gaaaaggtac tgggcttttt aatttatttt tcttatatgc cgacagtgaa acatcagtgt
                                                                     1440
tttgaaagta ttttatttca taatttgata tccaggtgtc cctgagagct gcatatgtaa
                                                                     1500
                                                                     1560
tgtttgccaa ctggagette atcattcaaa ttgttgctge atctggagge agtttageet
ttcctctgct ggaaatgcag acgaatatgt gaaatttctc ttctttgaat cttatttctt
                                                                     1620
atgattgcat tgtcttcatc atatcatcat tccatttgcc aaggaaaaca actttggcac
                                                                     1680
tataaaaata tgtggggctt tgaagtgtat tgctatctat gttggcttcc ctgactttca
                                                                     1740
taggatgagc agagtgcatt ccttgaaaac atgttctttt tttgttgtgt agaatgggga
                                                                     1800
taatgaaggg ggtgagaaag taggcctttt actaattttt catctatttg acttattgat
                                                                     1860
tcaactaaaa tgttttaagt atatgtgcca ggcattgtgc taaatgctgg ggatacagag
                                                                     1920
atgtttgcag aggtagttga aacatctcac tcctgccata gtgactcagg taaggttgag
                                                                     1980
aatttagete tgttaateta tteagaagat gteactaaga gtaagttgtt teageactea
                                                                     2040
aaagccgcaa atctgtaaat tggattaaga acacctgccc tacctacccg gcaatagtgt
                                                                     2100
gaatccaaat gctgcaatgt gagatgaggt acaagtaaag agctgtgttt tgtaaaccag
                                                                     2160
tgcagctcag cattgactcc ctctctaagt gaaaattgca gacaggcaag tctgttttcc
                                                                     2220
cttgccacct tcctttgggt ttggttgctc tttggatgaa tatgatgagg gcccacattt
                                                                     2280
ctgaatttat tggtttgagg ggaaaggctg gttagacgtc tttgtattgt caatggttgg
                                                                    . 2340
tttttctctg gcagtgtcag tgttaaagct atcattttcc ttcttaaatg gcatgagcaa
                                                                     2400
tgagcaaact teceteettt caacattete acetacatea tgtgeeeett ggeteaceta
                                                                     2460
ctgagettge caacttetet caaaaccaat getgeatttt gggagageaq etqtgaatqq
                                                                     2520
gcactgccta aattgcctct tggggtaatc tggagggtgg aggtgttaac tcaaacataa
                                                                     2580
ccctatgact tgactcagag atatccattg actttgagga ttagtgtgtt tgctcaggcc
                                                                     2640
agttgtacag ccagtgtgca agagatttgg tacetttgca ctaatgcaca caccagtgtc
                                                                     2700
tatttcattg ggtttggaat ccactggact ctgttgacct aaacagttag gggttttgat
                                                                     2760
tttttttgat atgcaaattt atattgagat cattttcata ttcctgtctt ttggtttgtc
                                                                     2820
tttactaaag cttggctggt ggtgctgtgt ccctagaatt atccctgcaa ccaactccca
                                                                    ,2880
agttacaage tteattaaga geettagaet eacttttte tageatette tgaeetgaga
                                                                     2940
aaattccact gggagtaaag gatagtatet tgtgtcatat gggtettaet etecetattt
                                                                     3000
taccaatgag aaaacaaaac tcagagaaag atgacttgct aatacatcaa acccatgtcc
                                                                     3060
tttttattga actatgctgc catttaatta accgcccttc ccctctgagg gagtaaggaa
                                                                     3120
acagatectg agtteacttg ageactttea aaaaageaag cagttgattg aatttggtgt
                                                                     3180
cagagaggag catactttgc aaatcaggaa gagtgacagc ttaccctgtc ctggaaccct
                                                                     3240
tatcccgctt ccaggctgac tttagttgat aatgcacttc tggctgtaaa tgttgccaac
                                                                     3300
acttcctggt tttgcttagg tacagtgaaa gggcatagtg agagctattt ttagtgattc
                                                                     3360
tgttctttct gtcagcaaca tgaaggaggg acgtttgaat aatttttgtt gtagaatatt
                                                                     3420
tetteatgaa aggettttgg gtgtetttaa caggtgttgg getagageee caecaggagt
                                                                     3480
tgaactgcct cttgggggtc aggttcccta ggagatctgt cacctcttca ggagtatttg
                                                                     3540
agaacattgt gtagttacag cttcactaaa tgcacgtgac aggettetgt geettgggag
                                                                     3600
ccctggctta tgctgaaact tctggctgac cagagcagta cagcaacttt gccctgtctg
                                                                     3660
tgttctgctt cctggatgca tccttcagcc actaaccagc attgcaagat ggagcagggt
                                                                     3720
gaacaagctg gagactgaat agtcttttgg agtttgcgtt ttgattattg caggcgtgtt
                                                                     3780
acaatatact ggtgatttac ctggtactgt ggcacctccc agaaagtctg gtttttgccc
                                                                     3840
catgtttgat atttactagg cagaaattct ttgtcctgtt aactgcctcc tgggagaaaa
                                                                     3900
agaggcaata cagagttaaa teettaattt geecaetgag acagatgage tgtggtatte
                                                                     3960
caaaagacaa attctatgac tagtgtctcc tgttcaatgt aagtgagacc ctctttggcc
                                                                     4020
aatctgcttc tagtcaaggc taaatggatt ggaataaccc tagttggcca ggctacacat
                                                                     4080
tgccagcatg tcccgttgag ttttaattgc ctcatgtggc tgtggacttt atgagtcaat
                                                                     4140
catttgtagg ctccagtttg cacctagttt tttttttta aaaagggcat ttacccctt
                                                                     4200
ttggtagccc tgttttatca agaatccatg gagggttttg gtcagtacag ctggtgcagg,
                                                                     4260
atcctcacgg agaaacagtg gagtttcaca ttgagttggt ttgaaatggc accccaggac
                                                                     4320
tttgggcctg ccttacttga tagcctcgtt cagtgagcaa agacttagtg agcagctctt
                                                                     4380
gtatgccaag tattttgcta agctctggaa aaaagataaa caagacatgg ttcttgcttt
                                                                     4440
```

```
caaggagtgt gtaattettt agecagatat ggaaacetgg accetgagtg ggagaaagga
                                                                  4500
gacagatgaa aggagtccgt gattttgtaa ccaagagctg cctgcatggt tatgagtatc
                                                                  4560
actgatttta gggacgcccc acagagctaa agcatttttt ttaatccgag aggacttttg
                                                                  4620
taactcatat tagttaatct tctagctctg agatagcaac acagctctta gaattctgta
                                                                  4680
agtagettga ggeeteetee tetaetgtae atgttettge ttteecaaaa ttgtaagttt
                                                                  4740
ggtttttcct atgaacaaga ctgtaattga tttttctctc cctgaggaaa aaagttcgga
                                                                  4800
ataaatgaga catggatatg aaactactta gcacaatgcc tggtacatat taggccctca
                                                                  4860
gcaaatgtgg ctaccgtgtc attatttcat ggtgagactc aaggcaaaac aagattctta
                                                                  4920
atttatgete egtaaatget agaggettgg geaataeggt etgteetgaa aaacaggaet
                                                                  4980
                                                                  5040
5100
ttaaaaatat ctgctggaca caattacggc cattacatga tgcaggtgat tctacctatt
ttttaaaaag aacaaaattt cttttatatt gtgacagtac attttaataa aggaaaatta
                                                                  5160
ttttcttccc cctactcccc ctcctttttt ttttctggta aagacagggt ctcactctgt
                                                                  5220
tgccagactg gtctcaaact cctggcctca agtaaccctt ctgtctcagc ctcccaaagt
                                                                  5280
                                                                  5340
gctgggatta caggtgtgtg ccacatgtcc ggccaggaaa attattttct atcttaaaga
aacatagtta cattttagaa tgtcaattca gttaaatctt tctcagtttt tacctttaga
                                                                  5400
tggctcctgg aaaggccagc gttccttttc ccctctctga attgaaagca cttgacccca
                                                                  5460
tgctgcccct gcttccaggc ctgtctcagt tgtcatatat tgtgagtccc tggcaccatt
                                                                  5520
actgttttct aagccagtct tctaggtctt actttcagga tgctgcttca tggcatgagg
                                                                  5580
atatagttta cagtgttgta gttttttttt ttttaaagct ttgttcttta aaaatacttt
                                                                  5640
ttaaaaaaaa atctactggt taaatttatt gtctcacaaa aatgttttta gaagattatt
                                                                  5700
tttttccaca aatgttttcc tttcctcatg ctgatgatca actgattttt gtcctacagg
                                                                  5760
tggttagett eteaegagta tttttteat ttttagagte tatttaecaa atgaceattt
                                                                  5820
ttagtgttaa aaggtactga ggaattgagg tatgtaaatc aggtgacata aacatgaaaa
                                                                  5880
ttatgtgcct aaatattttt gtaatggtgt aaaataaata ctttttcctg a
                                                                  5931
```

```
<210> 5401
<211> 1198
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (118)...(719)
<223> similar to gi3878412 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5401
gtcatttgca agggetttet egteetgtge tegtetettg atetgaetae eetggteeet
                                                                       60
gagcgtcaag tggaccaggg caggggtttt gagagcatcc tggatgtcct ctctgtcatg
                                                                      120
tacatcaacg cccagctgcc tegggagcag eggcaceget ggcgcctgct cttttegtct
                                                                      180
gagetecatg gacacagett eteccagete tgtggedaca teacteaceg ggggeeetgt
                                                                      240
gtggctgtcc tcgaggacca tgacaagcat gtgttcggtg ggtttgcctc ttgctcttgg
                                                                      300
gaggtgaagc ctcagtttca aggggacaat agatgcttcc tgttctccat ctgccccagc
                                                                      360
atggctgtgt acacacaca gggctacaac gaccactaca tgtacttgaa ccatggacag
                                                                      420
cagacgatec egaacggaet gggtatgggg gggcagcaca attactttgg getttgggtg
                                                                      480
gatgttgatt ttgggaaagg acacagcaga gccaagccca cgtgcaccac gtacaacagc
                                                                      540
ccgcagctgt cggctcagga gaacttccag tttgataaga tggaggtgtg ggcggttgga
                                                                      600
gacccctcag aggagcagtt ggccaagggc aacaagagca tcctggatgc ggaccctgag
                                                                      660
geccaggece tgetggagat cagegggeat tegegecaea gegaaggget cegggaagte
                                                                      720
```

```
coggacqatq aatqaqqaqc cgcctgagcc ttcctggagc caggacctqq attcctctgg
                                                                      780
gtagagggca ccgcctgcag cccctcttcc ctcccacatg gtttaactgt aatagcgtac
                                                                      840
cgcacgggtc acagcctggt agtcccacat gtgccaagaa gacgccctct gaagccatgt
                                                                      900
cctgactcat gggtggatct cccagaaata gatgtttttt aagttttctt ttttgcccta
                                                                      960
cagggtcacc ctcaggatct ctccaagaaa tcttgtgtca aattagtaac tcagtcttat
                                                                     1020
actitigation tittitaccaa egaaateeta ageagetgag acettiteaga eeeeegetgg
                                                                     1080
cattagggaa ttccgctggc attagggaat tccgctggca ttagcattgc tgggatctca
                                                                     1140
acttetetat tgaagaggg gtteeteeeg etggggttea tatggeetea eteaegee
                                                                     1198
```

```
<210> 5402
<211> 645
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (289)...(433)
<223> similar to gi4587207 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5402 gatcaaggaa ggactcaccg taatcacttg cttaaaaaga acacttaagc aaggactgaa 60 agggagtgaa gatgtgagac aaataggtat ctggaggagg agcgttccag ccaaggaaat 120 gcccagtgct ttggactcat ggcagaaatg tacttgagta ttctaggacc aactgggaag 180 cccatggaag ccagagtgga ggtcggggag ggagcaggag gacacagagc caaaqccttt 240 ctgaaccaag agggacagga attgggtgac cgttaataac ttgtaatttt ctqcctccaq 300 gattcagagt ttggttggag aaatgtcttc ttgctttcag ctgctgttaa catatcgggc 360 ctggttttct acctcatctt tggccgagca gatgtgcagg actgggctaa agagcagaca 420 ttcacccacc tctgagcaaa ccgagagatg tgctagatcc tqqtqcttaq ttcatcattq 480 ttttccctca cagacatttc tctttcatgc ctgcttgact gataagccat tagctagacc 540 ctgactatgt aacgctaaag attttaccat gcctggaaat tttacagggg aagaaaacac 600 gctagttatt taactgcaag ctactaaaag cataggtgtg ttgag 645

```
<210> 5403
<211> 745
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (273)...(349)
<223> similar to gi5102894 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5403
gteactettt ttgttetgge gtgteatgtg gtaetttagg tagetteaca ttttatgtte
                                                                       60
tagttaagta aaattettag agaatgaggt actatetetg gatagtetgt ttgatettga
                                                                      120
aaatgtacag aattetttge etettgatee tggaggaeta gtgaetttee agetetgaga
                                                                      180
gagaacagga tecetetgee aatttttte tgtggtgtaa ggcagageet ggtcaeteea
                                                                      240
tetaatgetg tetateteat eteaegtata ggagegggat getgeaetee aaceetgggg
                                                                      300
actatgectg gggtcagaca gggcttgatg ccattgtaac ccagggtgag gagctgectt
                                                                      360
ttgagggtgt ctgttcagtg tgtctcatgg ttccacaggc ttcctgcttt ccttctgcta
                                                                      420
ctttctgaaa tggcagtcac tctgctttct ctaatatttt gagctttggg gtttccattt
                                                                      480
tactaaaggg atgaatgatt tatggggtta geteageate catgeaette etaggtetga
                                                                      540
gggaatttct agaagatggt ttcacctcca taggaagaaa agacttctat aacaaatagt
                                                                      600
attttgtatt tttgtctctc ttgctcagtt ctataaggat tctattaaca aatatttcac
                                                                      660
aaaaaaagga gggtttcctc acatgttgaa gcagggattt ctgctagatg gagcaaagta
                                                                      720
                                                                      745
ggggaaggaa gcagagaaaa aagta
```

```
<210> 5404
<211> 3043
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(3045)
<223> similar to gi4589634 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5404
gaggaggage tggaggggge geggetteet eteggteget eeetggegee gggeetettt
                                                                       60
ctctgcctgg cccagggctg gcggccggcg ggggtcgcgg cggcggcagt gggggcgctg
                                                                      120
gegggeegeg ggtggegggg geegggeege ggeteegggt gttaggagae aagatggegg
                                                                      180
eggeteteag aaggeeggte teeteetete egeegteete egeeeegeeg etegeegeet
                                                                      240
ectecteteg ggtetectee tectegtttg etgeeteete etecteetge ageageacea
                                                                      300
gcgaccgccg aagcgccggc tcgctcaccc ggagctccgg aggtggatag acggggcagc
                                                                      360
tgcaggetee ggegaeegag geegagetgg ggeeggggeg gggaeggegg eggeggegge
                                                                      420
ggcgacggcg gcggcgccgg gtggggatgg ggtcgcagac gctgcagatc ctccgacagg
                                                                      480
gggtgtgggc cgcgctcagc gggggctggt actacgaccc gcaccaggcc accttcgtga
                                                                      540
acgogotgea cototacotg tggetettet getgggeeta coetteacce tetacatgge
                                                                      600
cetteettet accatgatta tagtageagt ttattgteet gtgatagetg etgtttteat
                                                                      660
tgttctgaag atggtcaact atcgactaca cagagcactt gatgctggag aagttgtaga
                                                                      720
taggactgca aatgagttca cggatcagcg aaccaaagct gaacaaggca actgttcaac
                                                                      780
caggagaaaa gacagcaatg gaccgagtga tcctggtgga gggattgaaa tgtctgagtt
                                                                      840
catccgagag gccacacccc cagttggttg cagttccaga aattcttatg ccggtctaga
                                                                      900
tecaageaac cagattggat etggtteete gegtettgga acageageaa etattaaagg
                                                                      960
agatacagac actgctaaga cttctgatga tatcagttta agtctgggcc aaagttctag
                                                                     1020
tetttgtaag gaaggaagtg aagaacaaga tttggcaget gateggaage tetttegtet
                                                                     1080
tgtctccaat gactccttca tctctattca gccttcctta tcctcttgtg gacaggactt
                                                                     1140
gccaagggac ttcagtgaca aagtgaacct gccaagtcat aaccaccacc accatgttga
                                                                     1200
tragtretetg teragegeet gtgacacaga agtagettet ettgtacett tacacteaca
                                                                     1260
ctettataga aaagaccace ggccgcgagg tgtaccacgg acttetaget etgetgtgge
                                                                     1320
```

```
ttttccaqac acttcactga atgattttcc cctttatcag caaagacgtg gattagatcc
                                                                     1380
agttagtgag ttagaatett ecaageetet ttetggatee aaagaateet tggtggaaaa
                                                                     1440
ttctggttta tctggggaat ttcagcttgc tggtgacttg aaaatcaata cttctcagcc
                                                                     1500
                                                                     1560
acccacaaaa agtgggaaga gcaaaccttt gaaagcagag aaaagcatgg acagcttgag
gagcctgagc acacggagta gtgggtcaac agaaagctac tgcagtggaa cggaccggga
                                                                     1620
cactaacagt actgtcagca gctataaaag tgagcagacc agctcaactc acatagagag
                                                                     1680
catcctgtca gagcatgagg agtctcctaa agcaggaaca aaaagtggga ggaagaaaga
                                                                     1740
gtgctgtgca ggcccagagg agaagaatag ctgtgccagt gacaaaagga ctagcagtga
                                                                     1800
aaagattgct atggaagcga gtaccaacag tggggttcac gaggccaagg accccaccc
                                                                     1860
ctctgatgag atgcacaacc agagaggtct cagcacctct gcatctgaag aagccaataa
                                                                     1920
aaatccccat gcaaatgaat ttacttccca aggggacaga ccacctggga acactgcaga
                                                                     1980
aaacaaagaa gagaagagtg ataagtcagc tgtttctgtg gattccaaag tgcgtaaaga
                                                                     2040
tgttggtgga aagcaaaagg aaggggatgt tcgacctaaa tcttctagcg taatccatcg
                                                                     2100
gacagettet geccaeaagt caggeaggag aegeacagga aaaaaaeggg etageagttt
                                                                     2160
tgattcaagc cggcataggg actatgtttg ctttcgaggt gtttctggta ccaagccaca
                                                                     2220
cagtgctata ttttgtcatg acgaagactc tagtgatcag agtgacttga gtagagcatc
                                                                     2280
aagtgttcag totgotcacc aqttcagcag tgatagetet totagcacca ottotcatte
                                                                     2340
ctgtcagtct cctgagggca gatacagtgc tctaaagacc aaacacactc ataaagaaag
                                                                     2400
                                                                     2460
gggcacagac tctgaacaca cacacaaagc tcatttggtt cctgaaggaa ccagcaaaaa
gcgtgcaaca cgacggactt ctagcacaaa tagtgccaag actcgtgccc gagtgttgag
                                                                     2520
cctggacagt ggcacagtag catgtttgaa tgactcaaac aggttaatgg cacctgaaag
                                                                     2580
tataaagccc ttaaccactt caaaatcaga tcttgaggcc aaagagggag aggtgctaga
                                                                     2640
tgagctatct ttattaggac gggcttccca gttagagaca gtcactcgat ctaggaatag
                                                                     2700
cttgccaaac caggttgcat ttcctgaagg ggaagagcaa gatgcagtca gtggagcagc
                                                                     2760
acaagccagc gaggaggcag tgtcatttcg ccgtgaacgc agcacattta ggcgccaggc
                                                                     2820
agtacggcgc cggcacaatg cagggagtaa ccctacccct cctacattgc tcatcggatc
                                                                     2880
accectaage etteaagatg gteageaagg ceageagtee acageceagg teaaagteea
                                                                     2940
gtcccgcccc ccttcccagg ctgcagtgct cagtgctagt gcctccttgc tggtaagttc
                                                                     3000
tettetaege tgtatgagae tggtggetgt gatatgteae ttg
                                                                     3043
```

```
<210> 5405
<211> 769
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(464)
<223> similar to gi854737 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5405
accaaaagga atactcccat tgaagctctc tgtgagaact ttccagagga gatggcaacc
                                                                       60
taccttcgat atgtcaggcg actggacttc tttgaaaaac ctgattatga gtatttacgg
                                                                      120
accetettea cagacetett tgaaaagaaa ggetacaeet ttgaetatge etatgattgg
                                                                      180
gttgggagac ctattcctac tccagtaggg tcagttcacg tagattctgg tgcatctgca
                                                                      240
ataactegag aaageeacae acatagggat eggeeateae aacageagee tettegaaat
                                                                      300
caggtggtta gctcaaccaa tggagagctg aatgttgatg atcccacggg agcccactcc
                                                                      360
aatgcaccaa tcacagctca tgccgaggtg gaggtagtgg aggaagctaa gtgctqctqt
                                                                      420
ttetttaaga ggaaaaggaa gaagaetget cagegecaea agtgaeeeag tgeeteeeag
                                                                      480
```

```
gagtcctcag gccctgggga ctctgactca attgtacctg cagctcctgc catttctcat 540 tggaagggac tcctctttgg gggagggtgg atatccaaac taaaaagaag aaaacagatg 600 cccccagaag gggccagtgc gggcagccag ggcctagtgg gtcattggcc atctccgcct 660 gcctaaggct ctgagcaggt cccagagctg ctgttcctcc actgcttgcc catagggctg 720 cctggttgac tctcctccc attgtttaca gtgaaggtcg tcattcaca 769
```

```
<210> 5406
<211> 933
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(301)
<223> similar to gi4868443 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5406 accatcagca gtgacacgga cgaggaggag gaacagaaac acgcccccac cagcactgtc 60 tecaageaaa gaaaaaaegt cateagetgt gteacagtee aegacteece etacteegac 120 tectecagea acaccagece etactecgtg cagcagegtg etgggcacaa caatgecaat 180 gcctttgaca ccaaggggag cctggagaat cactgcacgg ggaacccccg aaccatcatc 240 gtgccacccc tgaaaaccca ggccagcgaa gtattggtgg agtgtgatag cctqqtqcca 300 ggtaatttgg ggccaggaca gggcaggaac ctctccctgg agagtggttt tcctqctttt 360 ctgctgctag aaatgttgct gtatgggagc tagtacaata gaaagtgccc agtgactgca 420 ggcgaccctt accgaggatt ttattcaagt atccagggga ggcttctgct gaacagcaca 480 ttgtataagc agcgttttcc ttctttaatc ctgtaatcaa tacctctctg cctttacaat 540 ggctctgctt ccaactaggt tgattaatag aaaataaaag cctcctggtt ctttatgcct 600 gageetggaa gaataeetgg tetggggagt teetggetga catetageae caetetetge 660 caggaagece tggtggteag atgggettet tgtgtaggaa gaaceteete cgagtettge 720 tagggaaggg tgaaattggc ccctctcagc ccctcctcgg aatcagctgc tgggcggcga 780 gaccaagcca tgtgtgtttc tctgctcatg cactgctatc ttcagaggac tcctcctgtc 840 ccgcgaaggc ttgtcttgaa aattgggccc tggaataaag gctgagaacg taaccttctg 900 aataaactca gtggctcact gtaaaaaaaa aaa 933

```
<210> 5407
<211> 312
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(236)
<223> similar to gi1787326 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
    <400> 5407
taccggtaag gactgcaacc cgcagcccgc taactgcctg aaagatcaat acgtcttacg 60
ccattgctgc gtggatgatc ggtcgggcaa aatgggttat tccgtaaaat ttcttgtttt 120
aacaaggatg gacacggaaa cggcctcatt attccactgc aagccttgtt atagcaagat 180
gacttttacc atttatcacc cgcttactca cagtttttc acttcttgct ggtgattggt 240
ttaataacca tcaataaagt gatcacgcag tgaagtaata aggtgcaaaa gtaaatataa 300
gcatagaaaa at 312
```

```
<210> 5408
<211> 788
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (738)...(133)
<223> similar to gi2293468 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5408 tttttttttt ttttaaaggt aagagcactt tattettatt tgaaecacae tgtattgttg 60 attaccgagt gtgaaggtag tatgttcaga gtcttgtttt atgcctttgt agctgtgttg 120 ccagcatttg aaggtaactc ctccacataa gcggcaggaa aatggccttt tttcccattc 180 aaagatccaa accaccatcc ttcttctttt ttctcgtgta taatcacaat gtcacccttt 240 tecaaattea acteateate ttgeetgget tgaaaagaat acaaggeett geaaagtetg 300 etgetgaget gggetgeace aggggetgga gttgaagaac etggattget etgeecaeca 360 gaagatgcct tgctcacaat attctctaat ctcttcatta aaaaaggccg agatattttc 420 acatagetat gagtatgete etttteeete eacetgaaga tggaattaet acaaggatgg 480 ctgggttgag gtctttgctc aagttctgct aacattgatg acagtttgta ggagttcgct 540 tccaaaaggt ctagtttcaa attgttctca tccattaacg ctgctgtgtc tttctggctc 600 tttgcatcag agaaggagga ggtgctggag tacgttttaa gcattcgttc caggccttcc 660 ttgtcttttg aggettttte aatgtetete tgeagtetea ataattttgg ttttagtaaa 720 gactitegte tetetitate cattgeactg traggatett etteaaagta atcegttaae 780 aggaactc 788

```
<210> 5409
<211> 415
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(416)
```

<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2)...(180)
<223> similar to gil419564 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

<400> 5409
ctcagcttat gaaggcctca caagctctgg ctttaacaat ggcctgggct ccagctgtgg 60
ctttggcagg gcctctggct tcttcagctg taccagctcc tatagggcca tggttgtgag 120
gaagatcaag acctatgatg ggaagccaat gttcgagtcc tctgatgcac tgcccaagtg 180
aatggctgta gcagccctc ccaacctccc cttcctgtgg ctgccccaga gcctgtgagg 240
gatgctgcag tacaggggag catagggaac aggagatcca tctgaggctc atccttaccc 300
ctcagcccac ccttgtngga aggttttatt tgcatggagt acccccantt tgcccattgc
ccccaacaaa tttatttgt atttttccc aaaattaaaa ggncttcagt ttagg 415

<210> 5410
<211> 957
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (958)...(448)

<223> similar to gi179475 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5410 ttaagtaaca aatattgaaa aatttcattt gtacagttta tggttttaaa gaaaccatcc 60 tgaataaget caagttatag etaceagtta tgaatttata aagtttateg tgaceittat 120 tataattaat atttgtatta atcatcacat attattatat ataagatata aatttaatat 180 aactatctgg taattatacc tatgtttact aacaatttta caactgctgg ctgcagcggt 240 cgcatcgaca ttcatttatt attacatttc ccattttqca aaatqtttaq aqqaacttcc 300 ettecaattt gteaggtgtg acceeatgae ttgeatgtet etggggaeae tetgggaaga 360 tgtcttcata gataagagct cagataaaca tgagacagaa cagtcccaaa atccctcagc 420 atgececage ceteagggga gtteetaett gtttatgaat etgteeatat tatagetegt 480 tgagtagaga aattccagga tcttcctgca tggatttctg atcagaagag tggtccagag 540 tgagctgtca taatacactt cttcttggcg cagagctccc cctttgatga tctccagggc 600 acattectee titggagetg citgeatatg gactatecea gaaactgeet teatggetgt 660 ttetgtgtet atgaggecaa gaacacagag agtgattgat acattgacce tggacactga 720 atatteettt etgatggagg agaagaacce atccaaagca aacttgettg cagaatagge 780 agcaaccatt ggataagcca ctttcccagc cagagaggag acgacaacaa tgcttccatt 840 getetgette ageatgggea aggeagetae agteaggaee aegtaaetga ggaagttgae 900 ttccatgctt ttgcgcacat ggtgaatatc atcatgaaaa agattcaaag aagtgtt 957

```
<210> 5411
<211> 1316
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1317)...(22)
<223> similar to gi5924316 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5411
aaaaagacaa aagcaagtat ttatgaaagt ccatcagatt cctcagtaaa gctgaagtca
                                                                       60
cacactagag acaggtggtc tgaaggataa ttgaaggaag gtaacctgtt gggtccaatc
                                                                      120
tgttcttcag tgagcagatc gagagctgac cttacattta gagcatgttt agaataccag
                                                                      180
atgtaateca gggtgtgeet geacteeect gaggteegga tetteeaggt agtgtatggg
                                                                      240
ggttctgact gcccatcagc actcagcagc ttgtaggcgc tgttcaggtt gaggctggag
                                                                      300
gaagcaaagt gtttgtagac ctcttctgtt ggctctgcat tgaagtcccc acacacaata
                                                                      360
aggggaatct tggctccttg ggtgatgttt tgcaggttct gaaggaggtc acagccttga
                                                                      420
getgategaa acegeteeca gecagtgegt gettttagat gggtaacage gatgeagaac
                                                                      480
tgtcggcctg actccttgca ctccagggtc tgtgcaatgg ccacctggtt ggttttcaat
                                                                      540
gtcatggctg tcagcctaat attggcactg ttgactagct tgaatcggtt ttgaagaaaa
                                                                      600
aataaggcac aaccatctgg tccattgttg tgttctacat ctagacaagg tgaccagggt
                                                                      660
ttggggaaaa acgtgccttg atagcctagt ctactgagga gtggctggaa ggtgtcaaaa
                                                                      720
tagtggtcca cctcttggag gcacaatata tcaggctggt aggccaggat ttcttccagg
                                                                      780
atgagacatt teetttette eeatttgagt getteaacag ggeactgtae aaagttgtet
                                                                      840
ttgccttctc caagagcttg ggcgaggatg ttccattgca taaccctgat aggtgggtgg
                                                                      900
gtactagggc aatctgtcct cagatccaca aaatccctct ggaaccgggg aggtcgggtg
                                                                      960
tgcaggacgg ccctgcattc ctcaagaagc tctttaggat caatgggctc cagatgctct
                                                                     1020
gggtcaggtg acaccaaata ctctgggtgc tgggaggcag cgctgctgtt cagtgtcttg
                                                                     1080
gcgagaccac tatagagtct gcttgtaccg gttcccatgg aacacactgt tcgggaacac
                                                                     1140
gacctcgcgg cgcccgaggc cgccgaggcc gccgccagca gccgggggga tgcgggcctg
                                                                     1200
ggaacagcag ccggcgggga caacgggcgg cgcagccctg gggcgggcag gcggcgcagg
                                                                     1260
ccgggcgcgc ccctctgcag cagggccgag cagagccgcc gcggactatg aaacat
                                                                     1316
```

```
<210> 5412
<211> 1382
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1231)...(296)
<223> similar to gi3882239 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5412
tttttttttt ttaaaaatca ctgtcaattt tactaggatt tagaatataa aacctttaca
                                                                       60
tctcttttac aataaagaga atttagagct cacttgtcag gaaaatattt ttcattatta
                                                                      120
aaaaaaattg ttataaagtt atttcttctg atatggagtt tcaaagcatc taacataacc
                                                                      180
gcttcagaat ctccacagtg caaaaataaa caacatgcat acacttaaga actttacatt
                                                                      240
ctttgaaaaa caatacaaat tggaaagaaa attagtatgt gatcaaagag agtcagagct
                                                                      300
caagtctgaa ctttgccaat aaaggcagat gatctgaaga gttattttcg tttggaagtc
                                                                      360
cattaacagt ccataagtct tgttctgtaa gaagtgacag tctagctaga agtttcaagc
                                                                      420
caccaaccaa agcaacttca gctcctgggt gcccagcaac atcttccttt tctgcagagt
                                                                      480
agaaaatata atccacagtt atggcacttc gggaatgaca ggtggtcact tctggaattc
                                                                      540
cagtgtcagg aaagtaatgt gaataaacag atgacaaact gaaatggtgc tgtaaatttg
                                                                      600
aagacaattt ttcagctgtc actaggacct ctgtttgctt cagctgtgtt tgtgtcagat
                                                                      660
cactgtctgt cttttctact tttggtacct gctgtacctc atacacacag ttctgtgaga >
                                                                      720
tacctaggtt tgggggccaa attggaatag ataaaattct ttgtccccqt gaaqactqtt
                                                                      780
cctggccaga tacctttcct atgggaagtc cttcataatt caattttcct tcctttatga
                                                                      840
aactatatag tggagaacca ggaacagaat taaagtcacc acacataaca atagggcaga
                                                                      900
agetgecate tttetggtgg geaacactgg aaatetetge cagtageatt gecaattgeg
                                                                      960
teagettaat ateacetege ettggattat acaacagatg egtatttget acgeagattg
                                                                     1020
cagggcaggc agcatatgga attttgggct gtaagagtaa aactaatcca acattgtctc
                                                                     1080
tgtccaacag agaaatatca gggcggaaga attccactgg gttcactgac aagagtgaaa
                                                                     1140
atttggaatg tttgaagcaa atagcacagc catcaggttt cetteetgte egeatettat
                                                                     1200
attcacagtg ataacctaca agaaacaaat gaatttaaaa caaatgactg cttttatata
                                                                     1260
tttatcaaaa cacageteae gtgataette tgaacaatgt ttaccaaaet gtattetgea
                                                                     1320
aaacattagt aatgtaggat gtcaataaac attggaataa aaaacgtttg acactgggtc
                                                                     1380
                                                                     1382
```

```
<210> 5413
<211> 3450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3451)...(1345)
<223> similar to gi899298 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5413
cagggtggtg aactaaaaaa getggtteet gtgaacettg ggaaatggte teaceetet
                                                                       60
gagccctgga gatgacctga tggggcagct aggaggtcca aatggaagga ctgcaaataa
                                                                      120
aaggcactgg gaactctcag gggccacaca catgtgagat cttcccaata aaatcagcct
                                                                      180
tagetttaaa accaggaaat tgttageaac aggeteteac etteeteeaa cacceacage
                                                                      240
attgectate tecetgtgat agettgatte taaagataac ageetgeett taeteagaaa
                                                                      300
ccaggactgt gacgtgtttt gcacacattc tcttttcact ttcacagtgt gtgactatgg
                                                                      360
catgcaactt atgttctctg tgcctcagtt tactcaagtg ttaaacagga atactcacat
                                                                      420
gaggattaca tgagttaaaa tggataaaat ggataaaagt agagagtaaa ttatttaaac
                                                                      480
tttatcaaat ccttggtaca tgaccttaat acaattaaqt atttgttaaa tacatacatt
                                                                      540
ttaaagaaac gtcatcatat ccacacacct atgaggcacc tgcccaggac cacagagcca
                                                                      600
```

```
atcaatcagg tgatgagtga ttccaggcca gcaggaaacc accgcccact gacacaggga
                                                                      660
etgeaceate cateettggt ttgeatggtg cetgecatge tteetgtatt actgttaaat
                                                                      720
acatggggca ggcctttgga ggatcccaat gttttaaaag ggcaatacga atatgattct
                                                                      780
aatacataaa aagtatgagg gcagcaagaa tttagttaca aaacccaaaa atcctcaaag
                                                                      840
agaagccaca tagcactgtg cagtgttacc actgcctcga gtctggacag ggcacaggtg
                                                                      900
accgagacaa gtcttattta actgatttca caagaagggt ccgagtttta ttagacaacc
                                                                      960
catgtcaagg tacaaaatga ttaatgacaa tatcagccat attctattag ccaagtgcca
                                                                     1020
cctgtcacta tgaaactatc ctgtaggaca tccctgggct ctcagttgct aatgggctgc
                                                                     1080
tgaagaaatg aatgteetea aategagaee etaacacaaa gagatteeag agagtggett
                                                                     1140
agaaaaccca gctactctta ccaatgtggg gaaagggtca ggggaatgaa cctctgcagg
                                                                     1200
acaatttgaa ttcccaaact gagtaagagc gaaacaaata tgcaggcaag gcaaagcctc
                                                                     1260
aggggggctc ctgggtctgg ggcagggggt gggagacagg agaggcaaaa tggcagggac
                                                                     1320
ttgacagcag gttcctcttg tctacttctt cctcccgcct ctctccttga gggccaggtg
                                                                     1380
gatgactgcg ccattggcca tgttgtagta agccagtgag ttggaatctt tgatgaagat
                                                                     1440
acceteatae tgtagettet gttteeetge aggeatgeet gtggetteat gaatetteae
                                                                     1500
cttaatgaca gagacctggt ccgtgagtgg gagggtgaag accagcacct gcccattcag
                                                                     1560
tttccattcc gtcttatcct gcatgttggg cacctggact ttgatggaca ctggaccctt
                                                                     1620
gtttctgcgc aggaactcct cctctggcat gaggctgtcc tctgtcttca gttttttgga
                                                                     1680
ggtgggctca tcttccatgg gaggtggggg atgcacaggg ggcattgggg ctggagctgg
                                                                     1740
gacaggtgcc acaggtggag caggcacaaa ggctgttggc acaatcatgg ggggtgggcg
                                                                     1800
gggggccata ataggagggg ccgagggagg catgggcacc acgttgattc tgggcgcgtg
                                                                     1860
gatgatgggc ggcatggggg cgatcactga gcctgggggc agccggacca cagatgccat
                                                                     1920
tgggggccgg ggcatgacgg gtactgcgga gacaactgta gtacgaactg gaggtggcat
                                                                     1980
tgtgggtggt cggggcactg aagtgatggg tggagccgag ctgggggatgt tggtggctga
                                                                     2040
agatggtggc ggtggctgtt gagggatttc attgggcttg ctggggccaa tettetettt
                                                                     2100
agtgtcatcc tetggcacca ggcetttggc ettgtgaatg geetcaatet geteetggag
                                                                     2160
ggtgatgttg gcctgggdag cctgctgggt ccgggccatg ctgcctgagt ggccatccca
                                                                     2220
ggtcaccttt tcctctggct tctggatctc ctcctcaccg atcttcttac caatggctgt
                                                                     2280
tteetetaca eegaagatgt eagtaegeeg eteageeaae tgetteaage tgeteteaat
                                                                     2340
atccagacct ggtgcgtaca cctcatcatc gctctgcttc tcacggatgg agcgatcccg
                                                                     2400
ctgctccagc cagcgagggt caagaagtcc aatgcgcatg tgttcctgca ttttgctggc
                                                                     2460
ggggatette tecccagtaa tgggggacac aagataetea tetggageag gggetggagg
                                                                     2520
caagggettg gaggetttgg gateataate ettgeggaea atgaettggt etggagttgg
                                                                     2580
gggcagaggt ggaggcatgg gtgtctctgg gggtgggggc actttctgcc cttcttcttc
                                                                     2640
atcatetgaa eeeteateea tatettgtae ttgggtgtee tggteeaget gggaaggagg
                                                                     2700
etecteegee tteteetgtt tgteatecte eteateagae tegaceteea teteaaette
                                                                     2760
ctcactctcc ccaaactttt catagcgctc ctgaatgagg attcgggccc ccagctcctc
                                                                     2820
tggcgtggtg gggggaggga agttcccttg ctcattgggt tggaagtcca ctgtttccac
                                                                     2880
caccacaaa tcatgccagt cgatctgagc ataggccacc cgctccttct ccttctcctc
                                                                     2940
ttetteette tteeteteae gtteetggaa tttggeeeat teeaeteggt aacaceetg
                                                                     3000
atccaaaact tetegggggt tttcageete tttettgage tttgaaaata aacetttggg
                                                                     3060
tggaatcaag atcttggtgt actgttccac tagettegtg aagtagttga agaggetgtg
                                                                     3120
ctgtgggcgg agaaagtcaa actggtagtt gcgctgctct ttctgcatca gctgggtcag
                                                                     3180
aaactggcgc ccattcctgg ccacaaattg agccgtcagc ttcaccacat ccaagtcgaa
                                                                     3240
ggctgagata gagggaggat cagcaatgaa ctcaaactca ggaggaggct ctttgggcac
                                                                     3300
gatggtetet tggattaett gggettggae ettetgggge agetgetget gggtggtetg
                                                                     3360
ctgctgctgc tgcatgacct tggggatggc ggcggacggc tcctgagcct tcccttcctt
                                                                     3420
gaactcgctg accttgtggc ggtagtaggc
                                                                     3450
```

<210> 5414

<211> 1927

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (6)...(1753)
<223> similar to gil230668 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5414
ggcacgaggt ggacatggcg tgcggctttc gccgcgctat tgcttgccag ctttccagag
                                                                       60
tgttgaatct tccaccagaa aacttgatca catcaatatc tgcagttcca atttcccaaa
                                                                      120
aagaagaagt agctgatttt cagctttctg tggattcttt attggaaaaa gacaatqacc
                                                                      180
attcaagacc agatattcaa gttcaagcca agagactagc agagaagcta agatgtgata
                                                                      240
cagtggtgag tgaaatcagt actggtcaaa ggactgtaaa tttcaaaata aacagagagc
                                                                      300
tottaacaaa gacagtgeta caacaagtaa ttgaagatgg ctcaaaatat qqattaaaaa
                                                                      360
gtgaactttt ctctggactt ccccagaaga agattgtggt tgaattcagt tcacctaatg
                                                                      420
ttgccaaaaa atttcatgtt ggacatttgc gttctaccat cataggaaat tttatagcaa
                                                                      480
atctcaaaga agctttagga catcaagtaa taagaataaa ttaccttggc gattgqgqca
                                                                      540
tgcagtttgg tcttctggga actggcttcc agctgtttgg ctatgaggaa aaactgcagt
                                                                      600
ccaatcctct acagcatctc tttgaagttt atgtacaagt taataaagaa gcagcagatg
                                                                      660
ataaaagtgt agcaaaagca gcacaggagt tettecaaeg attggaaetg ggegatgtge
                                                                      720
aagcactttc actgtggcaa aaatttcggg acttgagcat tgaagagtac attcgggttt
                                                                      780
acaagcgtct gggagtatat tttgatgaat attcaggaga atcattttat cgtgaaaaat
                                                                      840
ctcaagaggt cttaaagttg ctggagagta aaggacteet actgaaaaca ataaaaggaa
                                                                      900
eggetgtagt agatetetet gggaatggeg acceeteete aatttgtaet gtaatgegaa
                                                                      960
gtgatgggac ttetetetat geaaceagag atettgeage tgetatagat egaatggaea
                                                                     1020
agtataattt tgatacaatg atatatgtga cagataaagg acaaaaaaag cattttcagc
                                                                     1080
aagtatteea aatgetgaag ateatgggat atgaetggge agaaaggtge cágeaegtge
                                                                     1140
cctttggagt agtacaggga atgaagactc gaagaggaga tgtcactttc ctggaagatg
                                                                     1200
ttttaaatga gattcaatta aggatgctac agaacatggc ttcaattaag acaactaaag
                                                                     1260
aactcaagaa cccacaagag actgcagaga gggtcgggct cgcagcactc attattcagg
                                                                     1320
acttcaaagg tttactetta tetgaetaca agtteagetg ggategtgtt ttecagagte
                                                                     1380
gcggggacac aggagtette etacagtaca cacacgeceg cetecacagt ttggaagaga
                                                                     1440
cttttggatg tgggtacctg aatgacttca acactgcttg tttacaagag ccacagtctg
                                                                     1500
tttcaattct tcagcatctt ctcaggttcg acgaggtgct ttataaatca tctcaggact
                                                                     1560
ttcaacccag gcatategte agttacette taactttaag teatettgea getgtggeae
                                                                     1620
acaaaacact acaaataaaa gatagteete etgaagtgge tggggeeaga etteatettt
                                                                     1680
tcaaagctgt ccgttctgtc ctagccaatg gaatgaaact tcttggaata acacctgtat
                                                                     1740
gtaggatgta atttccatta aaatggcttt taaaatgtca aaaaaaaaa aaaggggggg
                                                                     1800
cccttttaaa agaatcaaat tttactgccg ggggcgggga gagtaatatt ttttttatgg
                                                                     1860
ggccaccaaa ttaaaattgg ggggcgggtt taaaaacggc ggggagggaa aaacccctgg
                                                                     1920
                                                                     1927
```

```
<210> 5415
<211> 2725
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3)...(109)
```

```
<400> 5415
tgaaatctct agaggaagaa cagagagccc gcaaagacct ggagaagctg gtgaggaaag
                                                                       60
teetgaagaa catgaatgat eetgeetggg atgagaccaa tetataaggg aegteeteag
                                                                      120
                                                                      180
ttetttetgt tgaagaeeag ttetgaggtg aagetgggea eeeetgaeee aagteggggt
gcactcagga ccacagggca gggctgggtg gggcgccacc ttgctctctg tatatagaaa
                                                                      240
agctggagct tattctgcga atggagacga tcaaaccatg actgatgaat ccagacagga
                                                                      300
gggattgact ctgaggacct gagctacatc aatccactct gtgaacatct cagttacctc
                                                                      360
attetgeaat aagtteagtg actgactaaa agtettgttt tteeagaett tgaattgaat
                                                                      420
atataaatat tatatataca tgtttcttgt aaatatccca ttttgaatgc atacctgtgg
                                                                      480
tggttctgtc cgggctaatc cccatgctag aatgtccttt ccagctacgt gaataagaag
                                                                      540
teccatgeec geatecaceg gaageagaag cetggtggat geetggtteg tteegeagea
                                                                      600
ccagggcctc caccgtgctg tggcagcacc ccccatgtcg gtatttctaa ataaccttat
                                                                      660
ttatacctgc agagatacac ttcagtccca ttcagaagtc ttctcttaaa gcaqcattac
                                                                      720
agteccagae etgegggttt etgagggeag ettgetgget gacagaetea gtettgaeet
                                                                      780
caaggaagge ccatacggca ctgccgcatc cacctagagg tgtttgctct tgtccgctgt
                                                                      840
ctgagtactg tgattctcag atgagtttgc tgcgttttgg gaggacacag acggttctgt
                                                                      900
ataggetagt teagtaacaa caaaatacae tgttttgtet teeeteaaag agagatetta
                                                                      960
ctagaacctg taaatagaat gtattattta ttataagtca ctgcagctga tgaaaacaga
                                                                     1020
tggaggccat gctgcaggct gatactgatg ggtggagttt tgtcatcagg ccagcctcat
                                                                     1080
cocgaggtot cotocaccat tggccgtage cagcaggott cagtgctcac cgaaagtaaa
                                                                     1140
atcccctcct tcagcaagaa taaagcaata tacaccttag gttccactaa gtaacatagg
                                                                     1200
cataagcagg gaacgtttcc cccactgtgt tccagtgcag aggagacgaa gcctgtcctc
                                                                     1260
accgeggete getgggeeea ggetggetet ggaaageetg tgeggteetg ggeaggaage
                                                                     1320
ccggcccgtg gagcaggttt tcgttctgct tcagcaataa ataagggtga ccacagggac
                                                                     1380
tttgettttg gttteettte etgtgaaaag gttggtttta aagtgagata caetttteeg
                                                                     1440
tagaacaagt gttctatctt taaaaaccca aattgcagca ccgtggatta ctggtctcag
                                                                     1500
aacaactcat tgcgcatcag atttgactct ctgattttct gtctattqqc caaattqccc
                                                                     1560
titaactgca cctgaatcct ttgtgtactg atgcctttga gctgggcacc ttgggagagt
                                                                     1620
gttgtgttgc tgtttacggt tcttccttgc ccttgctaat tacagtctct ggtgcccagc
                                                                     1680
aageceettt ggetteette egtgaetggt caegttgtet geetgggete agegtggaee
                                                                     1740
tgccccatgc tgcagaacct ggcctcacct ggacttttca ctagaattgc cagcttcctc
                                                                     1800
aacttagcag atcattcact catgcgggca caagcaaaga tcaacacttt cttttttggt
                                                                     1860
aagcttgagt tttacaagtt attttttggt gatgcgtaag acattgcagt gggaaaccat
                                                                     1920
tcaacttgag tttattggag tttgctgttg tagcaggttt taactcagga acaactcttg
                                                                     1980
tetgatetet eegeeetet geegggagge gacattaaet gteetetegg ageeggtage
                                                                     2040
gttgctgtcc gagtccccag gacggatctc ctgcagacct gccttaatgc tcagatcgaa
                                                                     2100
gtatttcaca agaatacttg tgtttttaac agcccttccc ctqqacqqtq cqqccatqaq
                                                                     2160
ggcctcatgt tacggcattg ccttttcttt ctgtggatcc agtatcttcc tcggcttttt
                                                                     2220
agggagcagg aaaaatgcgt ctgagagcaa ctctttttaa aaacctqccc tqttqtatat
                                                                     2280
aactgtgtct gtttcaccgt gtgacctccc aagggggtgg gaacttgata taaacgttta
                                                                     2340
aaggggccac gatttgcccg agggttactc ctttgctctc accttgtatg gatgaggaga
                                                                     2400
tgaagccatt tettateetg tagatgtgaa geaettteag tttteagega tgttggaatg
                                                                     2460
tagcatcaga agetegttee tteacactca gtggegtetg tgettgteea catgeactgg
                                                                     2520
gcgtctggga ccttgaatgc ctgccctggt tgtgtggact ccttaatgcc aatcatttct
                                                                     2580
tcacttctct gggacaccca gggcgcctgt tgacaagtgt ggagaaactc ctaatttaaa
                                                                     2640
tgtcacagac aatgtcctag tgttgactac tacaatgttg atgctacact gttgtaatta
                                                                     2700
ttaaactgat tatttttctt atgtc
                                                                     2725
```

```
<210> 5416
<211> 414
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (416)...(161)
<223> similar to gi2257540 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5416

cccacgcgtc cgggactatc tttgagttca tcttgttctg aatgtgagtc tgagtctttg 60

tttccagatg acacagtgct gtctgagtcc tctgaatcac ctgcctcaga actgcagcaa 120

agtttctgct gcccagaaac tgaatgggct gcttgtaatg cagattcttc ctcctggaca 180

agaagtgctg ctgcttctag ttcttccagt tctaacccca actgggcctt tgtaagggag 240

acttccttta aggcttctgc aagagctgcc aacgttttgg atttgacttt ctgagtccac 300

acacagtagt atgagatgta gagatcattc agtatgtatg cctgggtcgt ttcctgaaaa 360

attttgtgaa tatccaggag acactttaaa actgcacttt tacttaattg cagg 414

```
<210> 5417
<211> 896
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(435)
<223> similar to gi5262621 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5417
accgggtega eccaegegte egeagteteg eeggeeteeg tgeeggggea gegeegettg
                                                                      60
gcatcacgta acggggacct gaatttacag gtggcgcccc cgccgcctag cgcccacccg
                                                                      120
ggcatggacc aagtgcaccc ccaaaacatt ccgqattccc ccatqqccaa caqcqqaccc
                                                                      180
ctetgetgea ccatttgeea egaacgtttg gaggatacge atttegttea gtgeeettee
                                                                      240
gtccccagcc acaaattttg cttcccttgc tctagagaga gtatcaaggc ccagggggcc
                                                                     300
accggcgagg tgtattgccc cagcggagag aaatgccccc tagtcgggtc gaatgtacct
                                                                     360
tgggccttca tgcagggcga aatcgcgact atcttagctg gggatgttaa agtgaaaaag
                                                                     420
gagagagaco ottgaaccao tgggcagoca cotootttgo octagaccág otcotocca
                                                                     480
atcctgaggg cccctcccc aacccaactc gaccctccct cccctcaccc ccaaggtgta
                                                                     540
gaattgtgaa tataacgaaa ctgcaaaaag ttagtcttat gtatagacat tattttcgtc
                                                                     600
gtatgtttct atattttgaa acaaaggtat gtaacttctt catttgaagg ataagctggt
                                                                     660
ttgtgttaag cagtatagta ttggttgggt catttgcatc atatcgttag catttatttg
                                                                     720
gtggcagaat gtttgcctag gtacagaatt aatagccctt agcaacgact gctgctggtg
                                                                     780
tgtatttttg taaatgttat gcactctctg aaaggaaaaa cacacacaaa agaaaaagac
                                                                     840
```

```
<210> 5418
<211> 6398
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(2354)
<223> similar to gi5081652 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5418 agaccaacaa attcatcaag gagctcatca aggacgggaa gtcactcata agcgcgctca 60 agaatttgtc ttcagcgaag cggaagtttg cagattcctt aaatgaattt aaatttcagt ..120 gcataggaga tgcagaaaca gatgatgaga tgtgtatagc aagatctttg caggagtttg 180 ccactgtcct caggaatctt gaagatgaac ggatacggat gattgagaat gccagcgagg 240 tgctcatcac tcccttggag aagtttcgaa aggaacagat cggggctgcc aaggaagcca 300 aaaagaagta tgacaaagag acagaaaagt attgtggcat cttagaaaaa cacttgaatt 360 tgtettecaa aaagaaagaa teteagette aggaggeaga eageeaagtg gaeetggtee 420 ggcagcattt ctatgaagta tccctggaat atgtcttcaa ggtgcaggaa gtccaagaga 480 gaaagatgit tgagittgig gageeteige iggeetteet geaaggaete tieaettiet 540 atcaccatgg ttacgaactg gccaaggatt tcggggactt caagacacag ttaaccatta 600 gcatacagaa cacaagaaat cgctttgaag gcactagatc agaagtggaa tcactgatga 660 aaaagatgaa ggagaatccc cttgagcaca agaccatcag tccctacacc atggagggat 720 acctctacgt gcaggagaaa cgtcactttg gaacttcttg ggtgaagcac tactgtacat 780 atcaacggga ttccaaacaa atcaccatgg taccatttga ccaaaagtca ggaggaaaag 840 ggggagaaga tgaatcagtt atcctcaaat cctgcacacg gcggaaaaca gactccattg 900 agaagaggtt ttgctttgat gtggaagcag tagacaggcc aggggttatc accatgcaag 960 ctttgtcgga agaggaccgg aggctctgga tggaagccat ggatggccgg gaacctgtct 1020 acaactcgaa caaagacagc cagagtgaag ggactgcgca gttggacagc attggcttca 1080 gcataatcag gaaatgcatc catgctgtgg aaaccagagg gatcaacgag caagggctgt 1140 atcgaattgt gggggtcaac tccagagtgc agaagttgct gagtgtcctg atggaccca 1200 agactgcttc tgagacagaa acagatatct gtgctgaatg ggagataaag accatcacta 1260 gigetetgaa gaeetaeeta agaatgette caggaeeaet catgatgiae cagitteaaa 1320 gaagtttcat caaagcagca aaactggaga accaggagtc tcgggtctct gaaatccaca 1380 geettgttea teggeteeca gagaaaaate ggeagatgtt acagetgete atqaaceaet 1440 tggcaaatgt tgctaacaac cacaagcaga atttgatgac ggtggcaaac cttggtgtgg 1500 tgtttggacc cactctgctg aggcctcagg aagaaacagt agcagccatc atggacatca 1560 aatttcagaa cattgtcatt gagatcctaa tagaaaacca cgaaaagata tttaacaccq 1620 tgcccgatat gcctctcacc aatgcccagc tgcacctgtc tcggaagaag agcagtgact 1680 ccaagccccc gtcctgcagc gagaggcccc tgacgctctt ccacaccgtt cagtcaacag 1740 agaaacagga acaaaggaac agcatcatca actccagttt ggaatctgtc tcatcaaatc 1800 caaacagcat cottaattoo agcagcagct tacagcccaa catgaactoo agtgacccag 1860 acctggctgt ggtcaaaccc acccggccca actcactccc cccgaatcca agcccaactt 1920 cacccctctc gccatcttgg cccatgttct cggcgccatc cagccctatg cccacctcat 1980 ccacgtccag cgactcatcc cccgtcaggt ctgttgcagg gtttgtttgg ttttctgttg 2040 ctgccgttgt tctctcattg gctcggtcct ctcttcatgc agtgttcagc ctcctcgtca 2100 actttgttcc ctgccatcca aacctgcact tgctttttga caggccagaa gaagcggtac 2160

```
atgaagactc cagcacaccg ttccggaagg caaaagcctt gtatgcctgc aaagctgaac
                                                                     2220
atgactcaga actttcgttc acagcaggca cggtcttcga taatgttcac ccatctcagg
                                                                     2280
                                                                     2340
agcctggctg gttggagggg actctgaacg gaaagactgg cctcatccct gagaattacg
tggagtteet etaacegtgg geeceageag aactgetgag etttacatgg tatecatgae
                                                                     2400
aactgctgat tccagtgtcg aggccatttc tctttgccac tgagaaatgc agcgtgactg
                                                                     2460
actotyttyc tacotytcaa catgaatytt totytyagot otygtytcac toatotocat
                                                                     2520
gatcatctca gccaacatgc atcagtactg caagaaaaga agtcaatcag cagaggagag
                                                                     2580
catttgataa ctaagaggaa gacttgcaaa gccgttttct catgagtacc ctgaataggg
                                                                     2640
ggcactcatt ttgtttcaac ggtccaaacg cccaaccttc agaaagagga agtcagatag
                                                                     2700
aaatagtccc tgagagcaca ctgtgtaggc taagcctgct ggggctgggt gaagaaattg
                                                                     2760
gcgctgagat ccaggctgga tccattgctt ttgtttacaa taggcactct ctctacccca
                                                                     2820
                                                                     2880
cctctcagta cttgagactt aaagtgctac aggcagctgg atctgtttgc atgcaggatg
                                                                     2940
aagagggtta aaacactgtt tatataagat ccaatctctc accatctcta aagcagccgt
tggcctgtca tcagtgagat acaatccagt cttctcatgc acgggaacac acacaccctg
                                                                     3000
cgtttctccc tcccaggcta ggaacctctc tgccaccaag ggctgccatc catcgcctag
                                                                     3060
taaccacggc aacccaacct actctaaaac caaaccaaaa aaataaaata acacatcctc
                                                                     3120
tttgcatgac acattttttt teteceettt ttggtacaet ttttttgaat ggttttetaa
                                                                     3180
                                                                     3240
caacttgaag cacaggatca aggaattagg gtggtctact tgaggcagat gggatagtag
ctgggaactg ttccctttct gattaatttc agcagcatcg gaatatattt ggagcacacc
                                                                     3300
ctagtaacct cttgagatta aattacatag tcttaatatt tctgttcctc catgcaactg
                                                                     3360
atgtttgttt tttaaagggt aagatgctgc ctcccaatgg gtgatgccat ctgactggtt
                                                                     3420
tecceatgte eteccattea eccatetetg eteccaceet tgeetgeete taacceacea
                                                                     3480
ctggccagcc cccttgccct actctgggct gctgaacact ggtgctgtgg tggttttcaa
                                                                     3540°
ggttaattcc taggctaacc gtatggccta tagtttaaaa gcacatctat gttcactgcc
                                                                     3600
actotgaaaa agggaattat ttotcagtot ttoaaggott gagactaata taggcoattg
                                                                     3660
tgattcagga aagaaacccc aaggttggag ggtgggatga gtacccctcc tgaaaaaggg
                                                                     3720
aatttgctgg tgaaaagagg ctggatcttg tggaagactg tcttggatgg ggaagtacta
                                                                     3780
cctggagatt tcaaattcac ttggcctgca aacaacagag ttatccgtat cttccacatg
                                                                     3840
tgaatgtcat tgcaagggtg actctagaca aactacaaac cgatggaccg tcaagctccc
                                                                     3900
caggagecee ttggatggea gegttgette agagtgttte etgtttetgg aatteettgt
                                                                     3960
tagggaactt taaagaagaa aagaaaaact tgaattgtgt tgaattactg tatcttttac
                                                                     4020
tttttttt ttgaaaagat aaacttgtca atagagtgat ttgaaatact atatggcaaa
                                                                     4080
gttttatatt tgatattett taagttagtt geteacacac ttaggetttg attgetgaag
                                                                     4140
aagtatgttt aagagggaga gaggggaggc aaagctgaag agagtcaagg tcactgtccc
                                                                     4200
cgcttcggcc tgaaggaaag agaagacatt tctatggcct tgctctctgc tgtcctgttg
                                                                     4260
gtgggcacga cacatcagtg gtgttcagtc tttatgtgtt tttaagcatc ccttgggctt
                                                                     4320
tggatttgga gatgggaaga gcatctccag gcaatgagtt tttcaaagaa tgcctactta
                                                                     4380
gtagtaagat gaagctcagg atttaaataa gtggggtcag gcattcgagt ttttgtcttt
                                                                     4440
cttctcaggg gtatttcttg gtacccccaa gatatcaggc cagaaagaga tgagtcagtt
                                                                     4500
getgtgetet ttaettettt ttetecacat ettetgagge tttagaaatg tggacaaget
                                                                     4560
agttttcaaa ttitgtgtgc gtctgtaagt tcttaaagaa ccagcttctt agaatgttca
                                                                     4620
gtteteaatg tgetgetget tteeettete etaaacattt taaaactett ecettteace
                                                                     4680
tccaattccc gtgatcccaa aagaagaga agactccagg aggggtatag attgtgccgt
                                                                     4740
catagettta caggtggttt taaagttage aggggtttgt catggtgatt cactactcag
                                                                     4800
tttatcagct caaggattat acagctcttt tccgggaact cacccaggag caagcgagac
                                                                     4860
actaccattg aatcagggaa tgagaattaa gaatggacag gaccaagaca gaactcaaga
                                                                     4920
aagccactgg ggaaaactcg agaagaaagg gagtatacta gtaggttaga tctgtgaacc
                                                                     4980
tgaggacaag aagacettgg gaaatggagg ceteagggga tgtgcattea catactatta
                                                                     5040
cgcttctcaa agagagacca acatcatgct tttaacacat ttgatgaggt tttttatttg
                                                                     5100
tgtttttgtt tgttttttga gatggagtct cactctgtgg cccaggctgg agtgcagtgg
                                                                     5160
egegatettg geteactgea accteegeet eeegggttea ggtgattete etgteteage
                                                                     5220
ctcccaagta gctgggacta cgggcatgag ccatcacacc cggctggttt tttgtgtttt
                                                                     5280
tggtaaagat ggggttttgc catgtttgcc gggctgatct cgaactcctg acctcaagtg
                                                                     5340
atctgcccac ttcggacccc caaagtgctg ggattccagg tgtgagccgc tgcggccgac
                                                                     5400
cacatttgat gtttgaagtt gtaatctgtc ccatcataaa cttacctgga gctcatgtgg
                                                                     5460
aggaacagaa ggccaagatc cttgctttgg gggtgcctca cgaagcatcc ctgtagacac
                                                                     5520
ttggccccag cttcactgct tggaagcatg tccctccctc ttgagttggc tctgatttga
                                                                     5580
```

```
aatcqqqaqa aacaqagctg ctqccaatgg gatcttttag gtaactccct ccctaqcttc
                                                                     5640
                                                                     5700
cgtgtgtctg tgcagtgccc atgagctgct gccaatggga tctttcaggt accccctccc
                                                                     5760
cagetteect gtggetgtge ggtgeeettg acagatgget tetetgttte cetttgeeca
gecaggetee ceteetteet attagetaca aaactggata aactteagaa tatgagecaa
                                                                     5820
tgagtaggaa ggaacttgaa gactaaagat tttactctct cccctatcca tgccccctac
                                                                     5880
ctctgactct ctctgtgtga acaggaaact ttagggtaga tgaggagaat gaattggtta
                                                                     5940
tcagagtgga agaccatggc ccaggatccc tgagctttcc cagtagcctc cagtttcctt
                                                                     6000
tgtaagaccc agggatcact tagccatagc ctgaatcttt taggggtatt aaggtcagcc
                                                                     6060
teteactett cetteaggtt actaacaaaa tttegtaget aaagaatgee atggeegggt
                                                                     6120
geagtggete aegeetataa teecageaet ttgggaggee gaggegggeg gateaegagg
                                                                     6180
tcaggagatt gagaccatcc tggctacgac ggtgaaaccc cgtctctact ggaaatgcaa
                                                                     6240
aaaattagcc gggtgtggtg gcggggcct gtagtcccag ctgctctgga ggctgaggca
                                                                     6300
                                                                     6360
ggagaatggc atgagcccgg gaggcggaga ttgcggtgag ccaagatcgc gcccctgcac
tccagcctgg gtgacagagc cagactccgt ctcaaagg
                                                                     6398
```

```
<210> 5419
<211> 958
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (70)...(710)
<223> similar to gi2914017 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5419
aaatcgaatt cccgtgtcga cccacgcgcc cgcgccattc tctaggagga ctgagcagat
                                                                       60
ggtgggcagg tcctgctggg cagcaagatg gactttgctg ccgtggatga gaatggaaac
                                                                      120
aatgetette atettgetgt catgeaegge eggeteaaca acateegggt teteetgaea
                                                                      180.
gagtgcacag tggacgccga agcetttaat etcagaggce agtcaccact gcacattttg
                                                                      240
ggacaatatg gcaaggagaa tgcagcggcc atctttgatc tcttcctaga atgcatgccg
                                                                      300
gggtatecte tggacaagee ggatgeagae ggeageaegg tgetgeteet ggeatacatg
                                                                      360
aaagggaacg ccaacttgtg ccgcgccatc gtccggtcgg gggctcgcct cggggtgaat
                                                                      420
aacaaccagg gagtcaacat cttcaactac caggtcgcca ccaagcagct cctgttccga
                                                                      480
ctgctggata tgctgtccaa ggagcctccg tggtgtgacg gctcctactg ctatgagtgc
                                                                      540
actgccaggt teggagteac caetegeaaa caecaetgte gteaetgegg aegtettett
                                                                      600
tgccataaat gctcgaccaa ggagattcct attataaagt ttgatctgaa caagcctgtg
                                                                      660
egggtttgca acatttgttt tgatgtactg actetgggtg gggtttetta gtgageeece
                                                                      720
eggagggtee aggeeacgte ettggteace tecceageag etgetetget caccageetg
                                                                      780
accccaccca gagcaggagc tggcgggtgt cttcctgcgg caatagactg gaacgattaa
                                                                      840
ggaccatggt gtgatagatc ccatttcaaa tgattccata tgattgtcag tgtgtgtc
                                                                      900
agactgtgat cgatttcact agatgtctca ctcatcagac caggccattg ggcctaag
                                                                      958
```

<210> 5420 <211> 1087

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1078)...(630)
<223> similar to gil213535 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5420
tttttttttt ttcaaqatqc aaaaaacttt tattttttqa ttacatqqcc tcaqataqtt
                                                                       60
                                                                      120
tcaatcaata ccatcaacaa cgaattttat gaaacacgtt tgtctttcct gtctacatag
atgccacagt agccctagtg tttaagtgtt gcctctcaaa cttgtcctct ttccagcatt
                                                                      180
ctcctctctc aacctgccac tcttgaaaac tcacttttct tttgcatttt gttctacatg
                                                                      240
tgaaaaatat ggaactcaag taagacccaa ggtagatccc aagggcttca gaaataccct
                                                                      300
gtcaagggca cagaatggtt agcaatagag tccctattta aggtcaatca tcgttaataa
                                                                      360
catgaatctt aaattctaac attacttact taacagtccc taaattctaa tattcctaac
                                                                      420
ttcacaaaac aaacttttct aaaacttctt accagtaaag gatatagctc acattaatat
                                                                      480
actictaagat aaccttaaga attictteatt geettgtaat teetgeeaag tgtttteate
                                                                      540
acatececaa ggetaateet agecatetee tgeataattt ttetataata ettetgeaca
                                                                      600
tacacagcaa atggtcacac gtggggcaca atacgggtcc catctttctg agttaatggc
                                                                      660
accatgacca gagacccctt gcatttggca cagatgaagc ggctggtgtc caacgatttg
                                                                      720
gtgtagcagc caatcctcgt tttgcatcca gtacattcat aatggacctt gtagttaatc
                                                                      780
ttatagttat ggcaacgggt gaccctgggc agctccgggt gtatcctgtt ggatttcctg
                                                                      840
gcataatact tccatgcgtc accatgagaa tcatggatac catcaatcag ccaggaggca
                                                                      900
gcatggcaca tttcatggat caaggtatcc cggattcggt ctgcagagtc gcagactttc
                                                                      960
aagccaatct ggatcttggc aaagcgccgc cactttgggt accacatctc accagtgctg
                                                                     1020
cataagccag cagttttcac catcttgtta ttccagccta tgcgtagttt ctctggcagc
                                                                     1080
tttttat
                                                                     1087
```

```
<210> 5421
<211> 2372
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2373)...(1498)
<223> similar to gi3850564 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5421

ttttttttt ttcaagcaca tccaccatg gtggctttat tcagtcacgt ccccacgccc 60
acggctccct ccaccaggca gacagagggg aggccaccc actgcaaagg gtcccagcca 120
gtgggcacca acctcaggaa gacgtggtcc ccacctggag cttccctcgg ctgccctggc 180
ccttgagccc gtcctgagga tttgtgcttt gactctgaca gggagcagca ggaagctgcc 240
agcccactgc ctccatgcgg gtccttggag ggcagacggt ggagcggcgc ttcctcagct 300
```

```
cccgcggtca ggccccatca gggatggtca cagtccagcc acaggggcga ctctgcccat
                                                                      360
cagtecect ggggeagega ccagatectg getggggeag caeegggaea ggeeetetet
                                                                      420
atgggcctaa ggtcaatgca ggtgggggct tgctgggccc aggccaatga acccacccgt
                                                                      480
aggagecete actgggeage agggeeagga gggeaceagg gaetggeege agagteeaet
                                                                      540
cggggcaggc gtctgtggct tggaacctgc cctcgccaag gcactggggg gttaaggagc
                                                                      600
agatecetea gaeggeettg ggeeagaage teeetggaga getgggeace tegaggageg
                                                                      660
totgggagec teaccetgte ceagtggete etggeacece tgggagegte ageaceacec
                                                                      720
caaagctggg tgcctgtgtc gccactaaac agaagggaaa ccgaggcagg ggggccggct
                                                                      780
                                                                      840
ggcagtggag cattetggca gegeegggeg accaagteee gaetggcage ggetggagtt
tggttttcag aagcgaaggc tggcgttggc acacagggaa ggctgcccga tgacgtgcct
                                                                      900
cgactgtgtt acatttactg aaggagagcg gcctcctggg cacgccactc aggcacggtg
                                                                      960
aggetetgtg geaceaceag eegeatggea gggeagagag tggegeegte etgeatgeee
                                                                     1020
cccacagcag accagagtcc cgtcctcacg ctgcacagtg ggtgatgtga gtttcaaaac
                                                                     1080
tacgcctcca gaccgagaaa ccctcccagc tgtcagcaag ccgtggcgcc gagctgccgg
                                                                     1140
gcacctgctg gctgctctcc agtctcaagg agctgggaca gcgggcatgg ggaggagctg
                                                                     1200
geotegagee caaaggtegt agggageeag geagggeeea ggageaceeg geactteeeg :
                                                                     1260
aagccggact ctgtagagga cgagcgtgga gggtctttcg ggtgggggca gccccagctg
                                                                     1320
tgtgccccga ggccccggga agtggggacg ggccgaggag ggagccagga gcacggcctt
                                                                     1380
cetectgggt gtetecaagg etgggetteg eegeegagee tggtteaegt ggggeegagg
                                                                     1440
accgcgtctg caggcggctc cagcaggcag cacgggctct cggcagggcc tctgccctag
                                                                     1500
acgtgeteca teteegggte egggteggge testeetest esteeteste gtetteeteg
                                                                     1560
tegtegteet cagegeagge ettgtecage ggegeeteee egteaeggge cageteetee
                                                                     1620
acgtgcgcca gcatgtcggc catcagcgcc tcctccagcc gcttccgcac ctgctgcacc
                                                                     1680
agetetteet getteatgat gteetegteg gteaceatga aggetttgea caggggetge
                                                                     1740
gtggtgttga gccatacgcc ggggttcttc tccacggcgg ccgagagctg tcccgtgatg
                                                                     1800
ggcatggtgc tagtgtgcag ggcgctggcg atggccgaca gcagcgtctc atccgtgcag
                                                                     1860
ccaggtccca cccctgcag gcccttgggg aggtccatgg tcttgaccag ctcctcagca
                                                                     1920
atgtcgaagg cgttcaggcc gctcagcttc ttctcccaga agagctggcg cggctggtcc
                                                                     1980
accgcettet gegggteget ettgacettg ttgetggggt ggttggtaat ettggteace
                                                                     2040
ggctgcttga agatggacgc cgtctggcgc acgggcagcg ccgtgttcag gtcgggcttg
                                                                     2100
cccttgacct ggttggagga gtcgtagcgc acgcgctggc ggctcttgtt catcttgctc
                                                                     2160
atcagcatet tgecegtgeg gaagtegaag gtgeteaggt ceatggagee geceaggtag
                                                                     2220
egegeeaget geggettget geggaactte tteeegeteg ggetatagta aaagacatee
                                                                     2280
etgtggeegg eegacageee egacettetg ggeacttett eeeteteea geeetgeggg
                                                                     2340
agcgccgggc actcccacct cttccgctcc at
                                                                     2372
```

```
<210> 5422
<211> 1799
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1801)...(1052)
<223> similar to gi4972684 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5422
gttaattttg gttccttaaa acgcccccc ccttttttt tttttcctt ccttttttt 60
ttttgcgaga cagggtctca ctttgtggct caggctggag tgtactggca cgttcttagc 120
```

```
teactgeage ettgaactee tgggeteagg caateeteet acettageet eetgagtage
                                                                      180
taggactaca ggaatgtgcc atcatgcctg gctaattttt aagttttttg tagagatggg
                                                                      240
atctcactat gttgcccaag ctggtttcag attcctgtgc tcaagggatt ctgctaactt
                                                                      300
ggctccccaa agtgctggga ttacaaatgt gagccactgt atctggccca tattcttttt
                                                                      360
taagaaaaga tgcagaggtg ttaaatatta atatcaaatt gtccaggcat ggtgtttatg
                                                                      420
aaattgtgtg ccctctgaca ggcaaccaaa cacacagac ttcatttctt tattaattcc
                                                                      480
tgcctcatca tcttttctca ttgatgctcc ttaatgtcaa aggaatctct ctctctcaca
                                                                      540
cacacataag accaaaacaa atatcttgaa catgcaaaaa aatagtctac gcttttgaat
                                                                      600
agtgtgcact gttgaatagt gtgcactgtt ggatagtgtg cactgttgaa gtgtgatgtg
                                                                      660
cctaaggcaa caggatettg ggaaagetet agatttttgg ettegaaata aaactgcatq
                                                                      720
ttgaatagca ggtttttaca tttattattg ttgtgtattt cctccccttt ttgcaatact
                                                                      780
atctacgctg agttatctat tgccaactag caccaattct ccaaatcaaa gtgtgtgagg
                                                                      840
aaaacacact cgtgcaatcc tctttaacag aagatacacc aagtaacctg tctgtctact
                                                                      900
tetgttacce agaaataaaa gaacttgaag ggetgettgg etgggagggg gteeegggtg
                                                                      960
gggaagagge atcetgeeet cagtegggaa tecatggtga acagetggat gteetgtgga
                                                                     1020
ttccagtaca gggccgactg gctgagttgt agacaagaga ccagacatag gggataaaaa
                                                                     1080
actecteggg etgeteetet teeacatatt tgaattteaa ttetggaaat ttetteagte
                                                                     1140
tgtctttggg cagcgcaacg acgccttgct taatgatttc caggacccgt tccactgaca
                                                                     1200
getcagetce agettgeage aacettgage taaagaagga gatcaccaga teaatatttt
                                                                     1260
gcattatatc ctgaaatgaa ggatgagttc gaaattgttc aaagagatcg cgtttgtaaa
                                                                     1320
gcagggcgta taccaagttt gggttgtggt gaagggaatt tgtcaggcag gagttgatga
                                                                     1380
tetetaacat cattegaate aettetteaa tgacatttag gtettgtgea taatetggta
                                                                     1440
gaggaacatc attagaactc agcgaacctc tcaaggactg tgtggcttgt tccagaactt
                                                                     1500
tgttgtgttt tttagacagc aaagaaaata aactgatgat cctctgggca gcatactgat
                                                                     1560
ggagagaacg aaactgtgcc gacatatttg ctaaagctgc caaacaattt gtgtcaaqgt
                                                                     1620
acttgteteg tgteetagte atgttgtatt gaatggttet tattaceace aggateagga
                                                                     1680
gactececaa ggagatttea gttaaaaete gttetgaata ecaagtaata ttttttagta
                                                                     1740
teactteatg aatggatetg ttgaageeat catetteegt aaggateaac aatattata
                                                                     1799
```

```
<210> 5423
<211> 1255
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (42)...(460)
<223> similar to gi4539001 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5423
cgcgagaccc gtccggaatt accggcacga cccacgcgtt cgaaaccaat aaaaacaatc
                                                                       60
ctgggaagac taagacttta gatccaaagg ctgtctttca gagaacaaag gaacactgcc
                                                                      120
tcatggggat caaaggaact gtgaagcgta gcacagacgg ggacttcatt catgctaatg
                                                                      180
ttgacattga cttaattatc acagaagaac ctgaaattgg caatatagaa aaacctgtag
                                                                      240
aaatttttca tataattgag catttttgtc ttggtagaag acgccttcat ctatttggaa
                                                                      300
gagatagtac aattegacea ggetggetea eagttggace aacgettaca aatageaact
                                                                      360
acaatgcaga aacatatgca teetatttea gtgeteetaa tteetaettg actggttgta
                                                                      420
cagaagaaat tgagagactt cgaccaaaat cgcctcctcc caaatctaaa tctgaccgag
                                                                      480
gaggtggagc teccagaggt ggaggaagag gtggaactte tgetggeegt ggaegagaaa
                                                                      540
```

```
gaaatagatc taacttccga ggagaaagag gtggctttag agggggccgt ggaggagcac
                                                                      600
acagaggtgg ctttccacct cgataattgt tgaagacatt gaacctattc atcctcctct
                                                                      660
aaccttcttt attgcaatta aatttcaagt gggagactta actttagaac tcacttccag
                                                                      720
cttgcacttt gctttaattt ctctgagctg caagaatgtc ttagcgagcc ttgcttgcag
                                                                      780
ttgtcacaca cactgtccgg tttttttcag gataaatgaa tgattctgcc ttttgttatg
                                                                      840
tgcgtgaaca gaatggaaca actcaagtag cttcatcttc agagactgaa tttattctga
                                                                      900
tagacttcag ctaattacaa aggattttgc taatttttgg gaataaataa tggaaaaaga
                                                                      960
tccagtctgt ggtatcatgc tagtgctgac agggccttga tagaatagag ttggaaaaga
                                                                     1020
tggtaagett ttgteagggt tttaacattt tettgatgaa acaataaaaa gaggtaaget
                                                                     1080
tttttcttct tttttttat agttttaaat aaactcagat ataatttgaa tactgaagaa
                                                                     1140
attaagagac tttgaacaaa aactcttccc aaatctaaat ttgatagggg aggtggagat
                                                                     1200
tccaggggtg ggtgaaagaa gagatagaac ttagcaggca gacttaaaaa aaaaa
                                                                     1255
```

```
<210> 5424
<211> 2830
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(847)
<223> similar to gi5106521 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5424
acaacccett cteetggaag aactttgtag acacegteeg egacaccaee geegegeace
                                                                       60
aggetetget ggtggeeaag aacgtegaet egttteegea aaaccaggag egetteggeg
                                                                      120
ggggccacat cgacgtgtgg tggatcgtgc acgacggcgg catgctcatg ctgctgccct
                                                                      180
tectgetgeg ceageacaag gtgtggagga agtgeeggat gegtatette aeegtggeee
                                                                      240
aggtggacga caacagcatc cagatgaaga aggacctgca gatgttcttg taccacttgc
                                                                      300
gcatcagcgc cgaggtggag gtggtggaga tggttgaaaa cgacatatct gctttcacct
                                                                      360
acgagaggac actaatgatg gagcagaggt cgcagatgct gaagcagatg cagctgtcca
                                                                      420
agaacgagca ggagcgagag gcccagctga tecacgacag gaacaccgcg teccacaccg
                                                                      480
cggcggcagc caggacccaa gcgccgccta cgccagacaa ggtgcagatg acctggacca
                                                                      540
gggagaaget gategetgag aagtacagga geagagaeae eageetatet ggttteaaag
                                                                      600
                                                                      660
acctetteag catgaageeg gaccagteea aegteaggeg gatgeacaeg getgtgaage
tcaatggcgt cgtcctcaac aagtcccagg atgcgcagct ggtcctgctc aacatgccag
                                                                      720
gtcctcccaa aaaccggcag ggagacgaga actacatgga gtttcttgaa gtcctgaccg
                                                                      780
aggggetgaa cagagteete etggteaggg gtggeggeeg ggaggtgate accatetaet
                                                                      840
cctaatgccc aacagcatca cggcactctg ggacaggcac ggaggacggc gtgggcagcc
                                                                      900
tgggcctggg cttggcccag ggaaacagac ggcagacaca cctgtccccc agtgatgcca
                                                                      960
cccaagetge ccatgggget tectacggaa gtttetagge ccgtcaceta gggeteteet
                                                                     1020
gttcagcctt aacaggctca gcaaatcagg gcgtggctgg acgatttcct tgcatctgag
                                                                     1080
ggcagacgct gctaccggag tgacctggac gtggccagat cttctcgcag gtcacaagaa
                                                                     1140
gccagtgagc ccttgccttg gtttctggaa gttcttttcc ttggctggat ttacccagtg
                                                                     1200
gttaggttgc atttctaccc catccagaac attcttggaa gagcacccgg agctgaagct
                                                                     1260
gtccctgatg atgaaggtga aacgtcagcc ctggccatgg ctccgctcag ggccccggtc
                                                                     1320
acctccgagt cactctgttc cttgactgtc tttgtgtttc tgtacctcaa ggcactgaag
                                                                     1380
ctggaggact ctgtccatgc ccgtgtcacc ctcgtgtggg agcctctggg ctcggcaggt
                                                                     1440
ccacatttca tgagctgagg cgtgggccag ggccatctgg aaagggaact cggcttttcc
                                                                     1500
```

```
agaacgtggt ggatcatctg tcgggtgtgt ggtgaacacg ttcagttcat cagggcctac
                                                                     1560
geteegggaa ggggeeeea getgtggete tgeeatgeeg ggetgtgttt geagetgtee
                                                                     1620
gagtetecat ecacetttag aaaaccagee acttetttte ataagcaetg acagggeeca
                                                                     1680
geccacagee acaggtgega teagtgeete acgcaggeaa atgcaetgaa acccagggge
                                                                     1740
acacgegege agagtgaaca gtgagtteee eegacageee acgacageea ggaetgeeet
                                                                     1800 ·
ccccacccca ccccacccca ggagcacggc acacagttca gcctctgagc tggctcacac
                                                                     1860
gtgccatccc cacccggtg ctccagggaa ggaggacacg gacccgacgt gggaggtcct
                                                                     1920
caggcagcag tggcgcctgg tgtcaggtct gtctggctga gtcccgggcg tcccctgcca
                                                                     1980
tggcctgtgc cttgcatgga ggcggggtg gcactgaaga gatagctttc aagggcccaa
                                                                     2040
cactttgcac ttcggctggc tgtgagtttc tgctttgtag gttgtggtca catttgcagg
                                                                     2100
ctgcgggcag tggcaccgac ttgggcctcc ctttctatgt ggcatattta tttatttaaa
                                                                     2160
caccccaggg agttacgtgg taacaaggtt gtccataaag aggttgcttc tatatactag
                                                                     2220
aggececaga tggceaggee ttgggetaeg tetggettge atggteteee aagggaatea
                                                                     2280
gccccatcaa caaagttcaa atcggggcag aggctgcact tgtgccccca gatgtttctg
                                                                     2340
aggagecaga ctagggetgg cattgetgta gagtgaegge tgetgeeeag agegtgteee
                                                                     2400
agacatcaca geggggetca geagtteeca cageetetge etgeettqqe taaqeatqaq
                                                                     2460
ttaagcagca aaacgctcct ccatgtctgg atggggccgg caggtcctgt gtcccctgca
                                                                     2520
cctggaggag agcaggctag aggcacagcg gccacatggt gctggctctg aacgttggtt
                                                                     2580
ggtggctgga aaacagccct gcttctgagg gccgctcagt tctgcacacg aaaccacctc
                                                                     2640
ctgagggete agetetgeee eegeeetggg etgeageete tgeaegeaag eaceaggeat
                                                                     2700
cettigigti gicaacteeg igtaaceagt aactacagee attiacaatt gacteegitt
                                                                     2760
ccttttgtag gtttccctgt ctgtctgtgt tagtagaaaa ataaaatcct atgaaatctg
                                                                     2820
                                                                     2830
```

```
<210> 5425
<211> 1247
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(704)
<223> similar/to gi2645856 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5425
atttcattaa agaaaacagc tttctgccat ttcaaattga ccacatcagg cagatggcgt
                                                                       60
atcagatctg ccagtcaata aattttttac atcataataa attaacccat acagatctga
                                                                      120
agcctgaaaa tattttgttt gtgaagtctg actatgtagt caaatataat tctaaaatga
                                                                      180
aacgtgatga acgcacactg aaaaacacag atatcaaagt tgttgacttt ggaagtgcaa
                                                                      240
cgtatgatga tgaacatcac agtactttgg tgtctacccg gcactacaga gctcccgagg
                                                                      300
tcattttggc tttaggttgg tctcagcctt gtgatgtttg gagcataggt tgcattctta
                                                                      360
ttgaatatta cettggttte acagtettte agacteatga tagtaaagag cacetggeaa
                                                                      420
tgatggaacg aatattagga cccataccac aacacatgat tcagaaaaca agaaaacgca
                                                                      480
agtattttca ccataaccag ctagattggg atgaacacag ttctgctggt agatatgtta
                                                                      540
ggagacgctg caaaccgttg aaggaattta tgctttgtca tgatgaagaa catgagaaac
                                                                      600
tgtttgacct ggttcgaaga atgttagaat atgatccaac tcaaagaatt accttggatg
                                                                      660
aagcattgca gcatcctttc tttgacttat taaaaaagaa atgaaatggg aatcagtggt
                                                                      720
cttactatat acttetetag aagagattac ttaagaetgt gteagteaac taaacattet
                                                                      780
aatatttttg taaacattaa attattttgt acagttaagt gtaaatattg tatgttttgt
                                                                      840
```

```
atcaatagca taattaactt gttaagcaag tatggtcttg ataatgcatt agaaaaatta 900 aaattaatt ttcttttga aattaccatt tttaaatacc tttgaaatat cctttgtgtc 960 cagtgataaa tgtgattgat cttgcctttt gtacatggag gtcacctctg aagtgatttt 1020 ttttgagtaa aaggaaatct tgactacttt atattcttaa aggaatattc tttatatact 1080 tcaaatttag aacttaactt taaaagtttt tcttctgtaa ttgttgaacg ggtgattatt 1140 attaactcta gataagcagg tactagaaac caaaactcaa aaaatggtta ctggtagaat 1200 tctattaaca tttaagggct ggattcttt tgattgggcg acgtcat 1247
```

```
<210> 5426
<211> 626
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (78)...(599)
<223> similar to gi5304869 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5426
tecegtgteg acceaegegt eegeteette tgaaggaagg agttecagea actgatgtag
                                                                      60
tetgteegga etetegetgt ggeeaegtat tetgeegtte etgtattget accagtetaa
                                                                      120
agaacaacaa gtggacctgt ccttattgcc gggcatatct tccttcagaa ggagttccag
                                                                      180
caactgatgt agccaaaaga atgaaatcag agtataagaa ctgcgctgag tgtgacaccc
                                                                      240
tggtttgcct cagtgaaatg ägggcacata ttcggacttg tcagaagtac atagataagt
                                                                      300
atggaccact acaagaactt gaggagacag cagcaaggtg tgtatgtccc ttttgtcaga
                                                                      360
gggaactgta.tgaagacagc ttgctggatc attgtattac tcatcacaga tcggaacgga
                                                                      420
ggcctgtgtt ctgtccactt tgccgtttaa tacccgatga gaatccaagc agcttcagtg
                                                                      480
gcagtttaat aagacatctg caagttagtc acactttgtt ttatgatgat ttcatagatt
                                                                      540
ttaatataat tgaggaaget ettateegaa gagtettaga eegggeaett ettgaatatg
                                                                      600
tgaatcactc gaacaccaca taattt
                                                                      626
```

```
<210> 5427
<211> 519
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(453)
<223> similar to gi5712195 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5427
gettaagege tgeecagaag gecaaggtga ageactegge categeggtg gttgteatet
                                                                       60
tectagtetg cttegeceeg taccacetgg ttetectegt caaageeget geetttteet
                                                                      120
actacagagg agacaggaac gccatgtgcg gcttggagga aaggctgtac acagcctctg
                                                                      180
tggtgtttct gtgcctgtcc acggtgaacg gcgtggctga ccccattatc tacgtgctgg
                                                                      240
ccacggacca ttcccgccaa gaagtgtcca gaatccataa ggggtggaaa gagtggtcca
                                                                      300
tgaagacaga cgtcaccagg ctcacccaca gcagggacac cgaggagctg cagtcgcccg
                                                                      360
tggcccttgc agaccactac accttctcca ggcccgtgca cccaccaggg tcaccatgcc
                                                                      420
ctgcaaagag gctgattgag gagtcctgct gagcccactg tgtggcaggg ggatggcagg
                                                                      480
ttgggggtcc tggggccagc aatgtggatc ctgtgcact
                                                                      519
```

```
<210> 5428
<211> 1566
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(690)
<223> similar to gi3947712 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5428
aagaattcag ggaaaagcaa aaactacaac gaaaaaagac agagctcata atggatgcta
                                                                       60
tecataaaça aaagagetta caatteaaga aaaceatgga tgeaaagaag aaetatgage
                                                                      120
agaaatgeeg ggacaaagat gaggeagaac aggeegteag eeggagtgee aacetggtga
                                                                      180
accegaagea acaagaaaag etttttgtga aactggeaae tteaaagaee geagtagagg
                                                                      240
actcagacaa agcatacatg ctgcacatcg gcaccctgga taaggtccga gaagagtggc
                                                                      300
agagtgagca catcaaggcc tgcgaggcat ttgaggctca agaatgtgaa cgaataaact
                                                                      360
tetteeggaa tgeattgtgg ttacatgtga atcagetgte acaacaatgt gteaceagtg
                                                                      420
atgaaatgta cgaacaagtc cgaaagagtt tagaaatgtg cagcattcag agggacattg
                                                                      480
aatactttgt gaatcaacgc aaaactggac agattccacc agcacccatc atgtatgaga
                                                                      540
atttctactc ctcccagaag aatgcagtcc cagcaggaaa ggctacaggg cctaacttgg
                                                                      600
caaggagagg acccctccca attcctaaaa gctcaccaga tgatcccaat tactctttgg
                                                                      660
ttgatgacta cagtttgctc tatcagtaaa atcaatgaaa ccagagcttt ttccqqctaq
                                                                      720
tgcttctgtg atatggaaag ggcacccaga gcagcaggac ctatagccac gttatgtcag
                                                                      780
caatgaagac tttgaagtga accettgeta taatttttta gagatttaaa atttatggta
                                                                      840
gacatttagg acaacataag caagtagagt totgcagttt tttgaagttt acaaattgcc
                                                                      900
ccattctgaa gaattattat ttcccagtta ctcaggttat gaatgaatta ggttttcaac
                                                                      960
atgggaagca tgaaatccac ttctggattt ggagcatcca cttgaggagc agaggtggca
                                                                     1020
gcagaggatt ctgagccacc aactgcagta gtggctcctt tggctttggg cagcctggct
                                                                     1080
gtggagtttc cacggcgaca cacagcctca gtggtgcaag atttaaaatt accttccttt
                                                                     1140
ttggctggaa gacttagaag ccgcctgatc atactttctc attttacaga tgaggaaata
                                                                     1200
aagcctacaa gtgtgaaatt aattteetta eagtttteet agetgatgag ggacagaace
                                                                     1260
agaactagag cotgagocca accoacatca ctattottot aaccottoot gaagttgtga
                                                                     1320
tgctcatgct gaaatttaag atgccaaata tttttgccag cactttttca gttgggagaa
                                                                     1380
tcaccagggt ttaaatgtca gatttatttt tatgtggatc cctgtgtatg ctgaactaca
                                                                     1440
gagcatgatg tttaatctaa tttaaggagc cactgattgt aaaacatgcc attattttat
                                                                     1500
gttgcactaa gaaggtgggg tcgaggagtt gccaataaac ttgggacaga ctattgatgc
                                                                     1560
caagcc
                                                                     1566
```

```
<210> 5429
<211> 2546
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(942)
<223> similar to gi4559312 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5429 atgeggaggg gegegettet ggegggegee ttggeegegt acgeegegta cetggtgetg 60 ggegegetgt tggtggegeg getggagggg cegeaegaag ceaggeteeg ageegagetg 120 180 gagacgetge gggegeaget getteagege agecegtgtg tggetgeece egecetggae geettegtgg agegagtget ggeggeegga eggetgggge gggtegtget tgetaaeget 240 teggggteeg ceaacgeete ggaeeeegee tgggaetteg cetetgetet ettettegee 300 agcacgetga teaccacegt gggetatggg tacacaaege caetgaetga tgegggeaag 360 geetteteea tegeetttge geteetggge gtgeegaeea ceatgetget getgaeegee 420 teageceage geetgteact getgetgaet eaegtgeece tgtettgget gageatgegt 480 tggggetggg accccggcg ggcggcctgc tggcacttgg tggccctgtt gggggtcgta 540 gtgaccgtct gctttctggt gccggctgtg atctttgccc acctcgagga ggcctggagc 600 ttottggatg cettetactt etgetttate tetetgteea ceateggeet gggegaetae 660 gtgcccgggg aggcccctgg ccagccctac cgggccctct acaaggtgct ggtcacagtc 720 tacetettee tgggcetggt ggceatggtg etggtgetge agaeetteeg ceaegtgtee 780 840 gacctccacg gcctcacgga gctcatcctg ctgcccctc cgtgccctgc cagtttcaat geggatgagg aegategggt ggaeateetg ggeeeceage eggagtegea ceageaacte 900 tetgecaget cecacacega etacgettee atceccaggt agetggggea geetetgeca 960 ggcttgggtg tgcctggcct gggactgagg ggtccaggcg accagagctg gctgtacagg 01020 aatgtccacg agcacagcag gtgatcttga ggccttgccg tccaccgtct ctcctttgtt 1080 teccageate tggetgggat gtgaagggea geacteeetg tecceatgte eegggeteea 1140 ctgggcacca acataacctt gttctctgtc ctttctctca tcctctttac actgtgtctc 1200 tetggetete tggeattete getgeetetg tettteeete ttgetgtete tgttteteat 1260 tetettteat gtteegtetg tgteteteaa ttaaceaete gteaaetget gattetaetg 1320 ggctgtgggc tcagacctca tttcaggcac cagattggtc gctacaccct ggacaagtga 1380 ctgcccgtct ctgagccttg atttcctcag ctgccaaatg ggaagaatag aagaatttgc 1440 ecetaaaeee eteetgtgtg etggeeetgt getagaeagt getggagaea tagttggggg 1500 tggagaactg cccttatgga gcttgcagtc cagtgaggtg gacagacctg tccccagaca 1560 gtgatggccc aaaatggtca ggactttaat ggaggaggtg aggtgttgaa agcacaggca/ 1620 gagtggtcag ggctgaagtc ggagaagcat agggactagg cccaatccag cctggaaagt 1680 cagggaggac ttcctagagg aagggacatc gaactaagac ctgaactatg agaaataggc 1740 aggaagaagt tgtacctgac tcatttttct caggtgtctc cagggagcag gacccatgga 1800 gggacceetg gtgtaggeet gggegataga etetteetea geageetgge aggeaggaaa 1860 cagacatagg accccagccc agatetgaat ggcatgggag gtgetgeeet taaccatgae 1920 accattgtaa gagetgteea catttgtatg ttgtgeeetg gaateageet ggttgagete 1980 aaatcccaac ttagccacgt ctggcctgtg teettgggca gtcacactac ctctctgatt 2040 ttgtttcctt atctgtaaaa tggtgatcat cataatacaa cttcaaaagg atttcaggct 2100 gagtgtggtg geteaegeet atacacceag caetttggaa ggetgaggaa ggaggatege 2160 ttgaggccag gagtttgaga ctagcctagg caacacagtg aggccttatc tcaacaacaa 2220

```
ccacaaaatctaaaaattagctgggtgtggtggtgcatgcctgtgatcctggctacttca2280gaggctgaggtggaaggatcacttgaggccaggagtttgaggctgcagtgagttatgatg2340gcactgctgcactccagcctgcgggacagagtgagaccctgtctgaaagaaagaaggaaa2400gaaaaaagaaagagaaagagagaaagaaaagggaaagaaagtgaagaaaggaag2460gaaaaaaagaagagaaaaagaaaagaaaaagaaaagaaaaagtaaagaaaagaa2520aagaaaaagaaaagaaaagtaagaaag2546
```

```
<210> 5430
<211> 1785
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1215)
<223> similar to gi5732618 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5430
teatgacett tgaactetat gaggaattte ttegagetat gggeetteag gagaggaagg
                                                                       60
agacaatoog tggtgtatac totgtgattg atcaactotc cogaactoat otcaatacac
                                                                      120
tggaacgeet catettteat etagteagga ttgetetgea ggaagacaet aategaatgt
                                                                      180
etgetaatge tittggeeatt gigtittgege eetgeattet eegetgeeet gacaccaetg
                                                                      240
acccactaca aagtgtacag gacatcagta agactaccac tigigiggaa cigatigitg
                                                                      300
tggaacaaat gaataaatac aaggetegte teaaagatat cagtagettg gaatttgetg
                                                                      360
agaataaggc aaagaccagg ttgtcactga ttcgtagatc aatqqqaaaq qqqcqtattc
                                                                      420
gtcgaggaaa ctatccaggt ccatcgtctc ctgttgtagt tcggttgcct tctgtgtctg
                                                                      480
atgtotoaga ggagacottg actagtgagg cagocatgga gactgacato acagaacago
                                                                      540
agcaagcagc tatgcagcag gaggagagag tactgactga gcagattgag aacctacaga
                                                                      600
aggagaagga ggagctaaca tttgagatgc ttgtactgga accccgtgcc tctgatgatg
                                                                      660
aaacccttga gtctgaggcc tccattggga ctgctgatag ctcagagaat ttgaatatgg
                                                                      720
agtetgaata tgetatetet gagaaateag aaagaagett ageeettage teeetgaaga
                                                                      780
cagctggcaa gtctgaacct tccagcaagt tgcgaaagca acttaaaaag cagcaagact
                                                                      840
ctttagatgt cgtggactct tcggtctcct ctttatgtct gtctaacacg gcatcatctc
                                                                      900
atgggaccag aaaactattt cagatttatt ccaaatctcc attctaccga gctgcctcag
                                                                      960
gtaatgagge eetgggaatg gaaggaeeat tgggeeagae caaatteetg gaagaeaage
                                                                     1020
ctcagttcat cagcagagga accttcaacc cggaaaaggg caaacaaaaa ttaaagaatg
                                                                     1080
tgaaaaactc acctcagaaa accaaagaga ccccagaggg gacagtcatg tctggccgca
                                                                     1140
gaaaaactgt ggacccagac tgcacctcca accaacagct agcactcttt ggaaataatg
                                                                     1200
aatttatggt ctgaaccggc agatgtgtgt ccctccgtgg ctacagagtg gtaaacaaat
                                                                     1260
ctcacctttg gggctgcgtt tcatcacctc gtccacaata gtcaatccta attgtggtcc
                                                                     1320
tgcctctttt ctaagcatat ggctaagact gtatgtgctg aattcctqqq cctcctqcaq
                                                                     1380
aagcagaaag cctgctgggg atggtgccag ctgtgccttg gctgttgtat ttgaattgag
                                                                     1440
atttttacta tacaaagcca cctagggcct ggggatttgg gtcagttgta gttgcctctc
                                                                     1500
ecceacete tittecette ecaaaggigg gigtigaact aggggggata tigetgieet
                                                                     1560
gagggaccet etcatttetg acatttgaag aaaacgtata aatetttett aacegtgaaa
                                                                     1620
gcaaaagcct ttgggtttat tttgggatag ttaggagcta gggtagaata taattttttt
                                                                     1680
ccaaaaactt acttacaaac aaaaagccta atccctctat tttaagattt ctgaaaaaac
                                                                     1740
actccactcc atgttatatt ctggggaaag caaaaacaaa aaaaa
                                                                     1785
```

```
<210> 5431
<211> 881
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6) ... (401)
<223> similar to gi203363 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5431
atgatattet acaggtggtt teteaagget ggaagtaett caaggggaae ttetattaet
                                                                       60
tttctctcat tccaaagacc tggtatagtg ccgagcagtt ctgtgtgtcc aggaattcac
                                                                      120
acctgacete ggtgacetea gagagtgage aggagtttet gtataaaaca geggggggae
                                                                      180
teatetactg gattggeetg actaaageag ggatggaagg ggactggtee tgggtggatg
                                                                      240
acacgccatt caacaaggtc caaagtgcga ggttctggat tccaggtgag cccaacaatg
                                                                      300
ctgggaacaa tgaacactgt ggcaatataa aggctccctc acttcaggcc tggaatgatg
                                                                      360
ccccatgtga caaaacgttt cttttcattt gtaagcgacc ctatgtccca tcagaaccgt
                                                                      420
gacaggacag gctcccaagc tcactctttg agctccaacg cttgttaaac atgaggaaat
                                                                      480
gestetttet tesecagast ceaggatgas titgeacgit aattitiett getteaaaat
                                                                      540
tgtcccacag tggcattctg gagtccgtct gtcttggctg gaaattctct gacgtcttgg
                                                                      600
aggcagctgg aatggaaagg agaattcagg ttaaagtggg aggggtgggt agagaggatt
                                                                      660
tagaagttcc aattgccctg ctaaggagga tcaagacccg taatccggca caacaccctg
                                                                      720
gggttttcca ctctttcaga gaaacctcag cttcatcaca tcaaagttac tccagagcaa
                                                                      780
ccaagcaatt ctcctgatat tgtcatccag ggcttttctt ggccaaaccc cctagaattt
                                                                      840
ccatgtetet gettagetgt getggeaget ageagetgge a
                                                                      881
```

```
<210> 5432
<211> 1617
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1618)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1134)...(441)
<223> similar to gi2677843 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5432
tttttttttta aagattttta tagaatagat gctttatgta aaatattaaa cataaaagga
                                                                       60
caaactgaca tttattccct gagtcctgtg acctgagatg taaatgaggg agccccantc
                                                                      120
ctataaatta aaattgggtg tgtgggtatt atcccataga agcattgcca tatcccccag
                                                                      180
atgectaggg aacagaaaag gtgggtgtge ccaacaaaca caatectace eteccagaaa
                                                                      240
acgcccatcc tgaccttttt attgtcgaaa ttaaaaaaata aaagatactt aaatacaacg
                                                                      300
gtgaacatat agggcaaaac agaatcataa aatttaatgt tgagttaagc agtgagctga
                                                                      360
atgtctaggt ctccaaattg gctttgaacc caaaaccact taaaaacaag tatgttcaca
                                                                      420
gttaacggca attggcttat aggtgagaga atggtcgaag ttgttccagt tgaacttcca
                                                                      480
gggaaattet eteeteaaga acateettta attgttgetg caattegeta tteaatetgg
                                                                      540
ccaaaacggt gttggtttcc ttattacgtc taattgatgc ctgaatagct ttcttatctt
                                                                      600
teccaacaga tetgggaata qaaggttgtg atgeaagaae ageagetaag acaceeqtet
                                                                      660
tttgtgtatg ttcatcaact tctggcctta attcatcttc tgattttaat cttcttcgaa
                                                                      720
caggtttagg tggtggagca agtggtgttg tgcctttgct cacattggca ggagcactag
                                                                     J 780
cagctgtctt ttcttcagtt ttactatctg ttttggcaac tcgaagagaa cttgcaggat
                                                                      840
cagaagettt ttcageegge aggaettetg gatgtttete ggetteatea tettgttegt
                                                                      900
cgtttacatt tgatgcagca aatacttcaa actgactgaa atctgcaaaa tttggttgct
                                                                      960
ctggtatctg ctgaggtgag gtactagtgt gagttatgag gccatcggca tccactgggc
                                                                     1020
gatgcacagc aggaccagga gcctgtgagg gctgtggtct tggaggcact gcaggaggat
                                                                     1080
gggcaacaac tecageetgt tgttgteetg catgaataca aaagttette tttttagtaa
                                                                     1140
ctgtataatc actttgttaa tagaagaaat aggctgaatg aatgtgacta catgataaag
                                                                     1200
atttotaaga atgittigita agiattagaa ggoaagtaot aactigitao atggidigia
                                                                     1260
tgtaacctaa agaccaaatc tcacagcctt tcatcagatc tcactttgct tcttacctct
                                                                     1320
attacatgaa geceteetgg catacteetg cetatteeca taatageaaa caatettgat
                                                                     1380
tttcttcgtg tatctctgac tgctgtttag gtatcaaatg aaaacttcca aattttccct
                                                                     1440
ttcacttaac acttcacttt tcctcaccat tctaaactca cagtgactaa aacataactt
                                                                     1500
catcatecte tgccctaact tttctatttt aaccaaggta acaacaatac tgccagttet
                                                                     1560
tcaaaaatta aaaacctggg taagttatga ctcttcttct tcatcagcca aattgag
```

```
<210> 5433
<211> 1201
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (108)...(328)
<223> similar to gi2879865 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5433
gcgtccgttc aataaagatc tccctcagag ataaggatgt agacttataa gcaggacaag
                                                                       60
actattcatc ttcttagcat tttactgcgg cgcccatcga cttataaatg gctgttgcgt
                                                                      120
atgggagagg agtgttatct ggaaggttta aaggtttaga tctctggaac acattcttaa
                                                                      180
tggaacatca caaaagatca attccaaggg acacctggaa cctcctgctg gactttggaa
                                                                      240
acatgattgc ggatgatatg tctaactacg atgaagaagg agcttggccc gttcttatag
                                                                      300
atgattttgt agaatatgca cggccagtag tcacaggtgg aaaacgcagc cttttctagg
                                                                      360
cagcaagtta agcaggagta agattatgaa atgatttgta tcctgcaagg agattgcagt
                                                                      420
cagttcctgg gtgcattgtc gctgattcca gaagtcattc ttgaccagcc atgaaaccag
                                                                      480
```

```
aggegecate ceattetgee ggaggaeage cageggetge tttgtggaea cegeaggaag
                                                                      540 -
ttcctcggga cacggctgct ttgggatgtt tggagatttg tcatcatagc ttttgcgtta
                                                                      600
ggaaatttct gcatgatttt ttaatattta caaaatacta aggtagagcc atagcgccgc
                                                                      660
ctgtgggacc gcagagcatg ctgcgtagct cgcgcgtcag gcgaaccagc gtccggcaqc
                                                                      720
gtcccgccga atgacgttgc ggtggcactg gcaacacggc atgtgtcctc tgcagggcgc
                                                                      780
tgggttttta tacacgtcaa agctgttaag aatgtgccct aagggagagg atcttgtcgt
                                                                      840
agagtetaat gttttttaaa attggtgeea geaatteaeg atttatattt tttgaattae
                                                                      900
caaatatcta gatttaccag ctctattttt gttttcattt tctctagaca ttcatctgaa
                                                                      960
aatcatttta tggttctcaa tccccatgta gctttgcata gcaacggcac acgtggcacg
                                                                     1020
attocagcag agtitatoto acacegtita tatatoactg ggoototott acttaaatat
                                                                     1080
tatttgacct gcctgagaag cttcataaag tatgttttt taaaatatat tttaattaca
                                                                     1140.
tttaaaaaga catttttcca tgaaaaacat ttattttatg agtgatgaat tatagatttt
                                                                     1200
                                                                     1201
```

```
<210> 5434
<211> 958
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(959)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2)...(426)
<223> similar to gi150149 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5434
tgctaaaatc ttggattatg gaaaatttaa gtatgaaaga aagaaaaaac aaaaagttga
                                                                   60
aaaagaaaaa caatctttca caaacaatag agaaattcgt ttatcttttg gaatcaattt
                                                                  120
aaatgatata aaaatcaaag caaaaaaagc caaagaattt'ttattagata acgacagagt
                                                                  180
aaaagtggct cttcgtctta gagggcgtga aaatacaaga cctgaacaag gtaaattaat
                                                                  240
tttaaattot ttttttgatg aagtaaaato gattgcaaaa ttaagtaaag aaatqcaato
                                                                  300
agttggtaat tttttaactc ttcatattga acgtgataag aaaaaattac ccaaatttac
                                                                  360
ttcttcaaaa caaataaagg aattaattga ttttgaaaaa actataaagg aagaagaaac
                                                                  420
taatgcctaa agcaaaaaca aaatcagcac ttnnnnnnn nnnnnngggg gggccgtttt
                                                                  480
aaaggatcaa agtttacttc cgcgtgcttg caaggtaaaa gtttttttat ggggccccca
                                                                  540
aaattaattc ccggggccgg ggtttaacaa cggggggagg ggaaaaaccc gggggttccc
                                                                  600
cacttaaatg gcgcgcgtgg gaaagnnngn tnnnnnngnn nggnntgtgn gttttggnng
                                                                  660
720
gtgtgggttt tttgttgtgg gggggggttg tgggttnngg ggttggggtt gtgtggtgtg
                                                                  780
gggtggggcg cgtgtggtnc tctgttcttg ccgcgggcgg cctcgccttc ttctttttgg
                                                                  840
ggcccctttc tgccccgggc cgggttcccc gccggggcgg tgcccccggg gcccccttcq
                                                                  900
teegtetget egtetegete gegggeeece etetenetee etettgtgtt gegeetee
                                                                  958
```

```
<210> 5435
<211> 1885
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (10)...(1145)
<223> similar to gi3766209 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5435
eggacgegtg ggegggeagt ggetgteaag eggeteetee gegagtgett tggeetggtt
                                                                     60
cggcgggaag ticaactgct gcaggagtct gacaggcacc ccaacgtgct ccgctacttc
                                                                    120
tgcaccgage ggggacccca gttccactac attgccctgg agetetgeeg ggeeteettg
                                                                    180
caggagtacg tagaaaaccc ggacctggat cgcgggggtc tggagcccga ggtcgtgctg
                                                                    240
cagcagetga tgtetggeet ggeecacetg caetetttac acatagtgea cegggacetg
                                                                    300
aagccaggaa atatteteat cacegggeet gacagecagg geetgggeag agtggtgete
                                                                   360
teagaetteg geetetgeaa gaagetgeet getggeeget gtagetteag cetecaetee
                                                                    420
ggcateceeg geaeggaagg etggatggeg ceegagette tgeageteet gecaeeagae
                                                                    480
                                                                    540
agtoctacca gegetgtgga catettetet geaggetgeg tgttetacta egtgetttet
                                                                    600
ggtggcagcc accectttgg agacagtett tategecagg caaacateet cacagggget
                                                                    660
ccctgtctgg ctcacctgga ggaagaggtc cacgacaagg tggttgcccg ggacctggtt
ggagedatýt tgageddaet geogdageda egeddetetý eddeddaggt ýdtggdddae
                                                                    720
cccttctttt ggagcagagc caagcaactc cagttcttcc aggacgtcag tgactggctg
                                                                    780
gagaaggagt cegagcagga geceetggtg agggeactgg aggegggagg etgegeagtg
                                                                    840
                                                                    900
gteegggaca actggcacga gcacatetee atgeegetge agacagatet gagaaagtte
cggtcctata aggggacate agtgcgagae etgeteegtg etgtgaggaa caagaagcae
                                                                    960
cactacaggg ageteccagt tgaggtgega caggeacteg gecaagteee tgatggette
                                                                   1020
gtccagtact tcacaaaccg cttcccacgg ctgctcctcc acacgcaccg agccatgagg
                                                                   1080
agetgegeet etgagageet etteetgeee taetaceege cagacteaga ggecaggagg
                                                                   1140
ccatgccetg gggccacagg gaggtgaggt gggctggatg ccacacagat ggtctccgtg
                                                                   1200
ctggctcact gaaagagctg agcctgtggc tggcctcaga atcaggctgg gtgcagtggc
                                                                   1260
tcacacctgt áatcccagca ttttgggagg ctgagtgaga ggatcacttg agétéaggag
                                                                   1320
ttegagacca geetggeeaa catggeaaca ceceatttet acaaaaaatt tgtaaaatta
                                                                   1380
gccaggcatg gtggcgcacg cctgtagtcc cagetgcttg ggaggctgag gtgggagaat
                                                                   1440
cacttgaged caggagtteg aggetgeagt gagecaggat catgecactg cactecaged
                                                                   1500
tggtccacag agagacactg teaccecett teecceacaa gaetggcaga ggetgggcag
                                                                   1560
cetggggetg atgaageaga gatgtteget ggateeeagg ceetggeace ceteaggaaa
                                                                   1620
tacaagaaaa agaatattca catctgttta atgtgcataa agccaaggaa aggacagttc
                                                                   1680
1740
aaacttggaa taaggggggg ggggggggtt tagaaaaaaa aacccttact tgggctgggg
                                                                   1800
gccggggatt ttttttttga ttcgggattc aaactttgac tcgggggggg gcttctttcc
                                                                   1860
ctagggggg aagaaaacc.gccc
```

```
<210> 5436 <211> 621
```

<212> DNA

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(622)
     <223> n = a,t,c or g
     <220>
     <221> misc_feature
     <222> (16) ... (100)
     <223> similar to gi3002588 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5436
cgcttcttgt gcaaaaagac gcgtgaggac ggctggtaca aggggaccct gcagcggaac
                                                                        60
ggccgcacag gcctcttccc gggcagcttc gtcgagagct tctgagaact ggtgctccct
                                                                       120
gcacccaget cacagagggg gaggccgcct gggaagetec acggcacaca gagagggage
                                                                       180
catggcgccc caagggttcc aggtcatctc caaggcacct ggcgggggat accetggccc
                                                                       240
agggtggggg ccagggactg tggaggtcgt gccttctccc aaaaccccca aacggagagc
                                                                       300
acacctggga tgttcttcaa ggaaatgccc accccctctg tggaaactgc aaagaaagca
                                                                       360
ccttgaggaa gagaggcagg tgccggcgca ggcaggcctg tggctgtggt ttgcagccat
                                                                       420
ggcagcgttc tcatttacca cctaagcagg gttggaggtt gcaggaggtc tgcaggcgag
                                                                       480
gtgggtggca tgggggccag gagcgctgga gatcatcttt ctgggctgcc ctgggcttcc
                                                                       540
egeggngeee aggttgetet gteaceatte tatatacete agteacetge egeceggetg
                                                                       600
ctcancnaag ggtgtttgag g
                                                                       621
     <210> 5437
     <211> 1337
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1338)
     \langle 223 \rangle n = a,t,c or g
     <220>
     <221> misc feature
     <222> (305)...(1048)
     <223> similar to gi1065454 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5437
caccetgtta tecatteete tigigittig gataatataa gtaettaeat titigitegti
                                                                        60
gaatatgctg atggaagttt tcttccagtc tagatacatt caacccccaa gtgtcagagg
                                                                       120
catgttctgt atctaaatat agcacctaat ctccattgtc agatttgtct catgaggaag
                                                                       180
aatgootgtt gtoactoott otggggaata atgocaagoa gotgttggag caacgttgto
                                                                       240
```

```
cttaacaggt ccattccaaa gctgttttct tcatacctga gccttctgca cggtgacact
                                                                      300
gatttttccc cattttcagg gagctgtgat acacaagttg ggcatcacct tggtgtctct
                                                                      360
ccttttgttt ttgacgctaa cgaagacctt tcctgtcacc tgccttgtgg atgactggtt
                                                                      420
tgtccataaa gcaagctttc cggctcgact ctgctactta tatgttgtca tgcaagcctc
                                                                      480
aaagcccaag tattactttg catggacatt agctgatgca gtgaataacg cagctggctt
                                                                      540
tgggttcagc ggagtggata agaatgggaa tttctgttgg gatctgcttt cgaacctaaa
                                                                      600
catctggaaa attgagactg ccacaagttt caaaatgtac ttggaaaact ggaatattca
                                                                      660
gacagetact tggctaaagt gtgtgtgcta teagegggtt ceatggtace ceaeggtget
                                                                      720
aaccttcatc ctgtctgctt tgtggcatgg tgtctaccct ggatactatt ttaccttctt
                                                                      780
aactggaatt cttgtcacat tagcagctag agcggtcagg aacaactaca gacattactt
                                                                      840
cetttettea agagetetea aggetgtgta tgatgeagge acetgggeeg teacteaget
                                                                      900
ggctgtctct tacacggtag caccetttgt gatgttggca gttgaaccga ccatcagett
                                                                      960
atacaagtee atgtaetttt atttgeacat cataagtete etgataatae tatttetgee
                                                                     1020
aatgaaacca caagctcata cgcaaaggcg gcctcagact ctgaactcta ttaataagag
                                                                     1080
aaaaacagat tgatacctcc aagagaagcg gaacaagcaa aactgcagaa cgttcgaaag
                                                                     1140
atgagatgac aaggetteaa gggeteetee ggtggettat aggegatgtt tacatgeate
                                                                     1200
tttattttgt tctttttaa agtgcaggga gtannnnnn nnnnnnnnn nnnnnnnnng
                                                                     1260
aaaagggtgc ccttttttt cccaaatttg gaataaaatg gggagaacct ggattttttg
                                                                     1320
aagtccccc tcccggt
                                                                     1337
```

```
<210> 5438
<211> 2370
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (94)...(1453)
<223> similar to gi2988399 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5438
ggtggaattc attattgtta cgtcttccag ctcatgcatt ccaaccctcc ccagccctt
                                                                       60
cctgccttca tctcttacct ctatacccaa ggccttcccc gctatccact caacatcccc
                                                                      120
ttetgtttta tgecagggae tgtgatgatt cegggtgtga etcagetgae agagaaggae
                                                                      180
ctcaagtacc ggctgcaggc gtccagggcc aagtccatta tcaccagtga ctccctagct
                                                                      240
ccaagggtgg atgccatcag tgccgaatgc ccctccctcc agaccaagct gctggtgtca
                                                                      300
gacagcagte ggccaggetg gttgaactte agggaactee teegggagge ttetacagag
                                                                      360
cacaactgca tgaggacaaa gagtcgagac ccgctggcca tctactttac cagcggaacc /
                                                                      420
accggggccc ccaagatggt cgagcactcc cagagcagct acggactggg ttttgtggcc
                                                                      480
ageggaagae ggtgggtgge ettgacegaa tetgacatet tetggaacae gaetgacaet
                                                                      540
ggctgggtga aggcagcctg gactctcttc tctgcctggc ctaatggatc ttgcattttt
                                                                      600
gtgcatgage tgccccgagt tgatgccaaa gttatcctga atactctctc caaattcccg
                                                                      660
ataaccaccc tetgetgtg cecaaccate ttteggetge ttgtgcagga ggatetgace
                                                                      720
aggtaccagt ttcagagcct gaggcactgt ctgaccggag gagaggccct caaccctgac
                                                                      780
gtgagggaga agtggaaaca ccagactggt gtggagctgt acgaaggcta tggccagtct
                                                                      840
gaaacggttg tcatctgtgc caatccaaaa ggcatgaaaa tcaagtctgg atccatgggg
                                                                      900
aaggegteee caccetacga tgtgcagatt gtggatgatg agggcaacgt cetgeeteet
                                                                      960
ggagaagagg ggaatgttgc cgtccgtatc agacccactc ggcccttctg tttcttcaat
                                                                     1020
tgctatttgg acaatcctga gaagacagct gcatcagaac aaggggactt ttacatcaca
                                                                     1080
```

```
ggggaccgag ctcgcatgga caaggatggc tacttttggt tcatgggaag aaacgacgat
                                                                  1140
gtgatcaatt cttcaagcta ccggatcggg cctgttgaag tggaaagtgc cctggcagag
                                                                  1200
catectgetg teetggagte ggetgtggte ageageeeag acceeateag gggagaggtg
                                                                  1260
gtaaaggcat ttatagteet tactecagee tacteetete atgacecaga ggeactaaeg
                                                                  1320
                                                                  1380
cgggaactcc aggagcatgt gaaaagggtg actgctccat acaaataccc caggaaggtg
gcctttgttt cagaactgcc aaagacggtt tctggaaaga tccaaaggag taaattgcga
                                                                  1440
agtcaggagt gggggaaatg aggtgcaccc caggaaggcc ccgtagacct ccgaagactc
                                                                  1500
                                                                  1560
cacaagaaac taatggatca ctggtcagtc cccatgggga gcatcatctc ttcgacccta
                                                                  1620
aaqatgtcaa aggtgtgcag cttccaaacg gcatccccag gatcactggg caatgctgga
                                                                  1680
aagagcaaaa gaatatcatt ggccctgatc acatagatgc tgcgccgcct agcaaatgct
                                                                  1740
tggtggttcg acttctccct ctgtctgggg gcaggctcag catctgccca ctggtctcac
taagagettt cagattteec tecataggae aggttaecat agaettgggg caettgtggg
                                                                  1800
tactcattct ctgccagtgg gaatgtaaag gcttcatcct ttgtatgtaa ccatttggca
                                                                  1860
                                                                  1920
aaagtatgca ggaacataaa ataaaatatc ctttagctca gaaattctat cttcgggagt
caccacaaaa gaaaaaaatc aaaatgcaga aaatgtgtgg tgcactaaga tgatcacaca
                                                                  1980
gcattaaaac taaaaaaaaa aaagaaaaaa ttaacaatta acatccaaac aacaaggaaa
                                                                  2040
tgattaacaa aattgtagta gattaactca attacatatg atgtagccac taaaatattt
                                                                  2100
gagagcagtt tagtatgtct tgggaaaagt gtaagctata ttaattttaa aaatcagagc
                                                                  2160
aaaaatattc atactggaga atcccaactc tgaaaaataa agggaaaact gtggttaatt
                                                                  2220
2280
ttcctttttc cattacattt ctgtattttc caagtttttg tacgaagcac atacaactat
                                                                  2340
tttaatgaaa aagttatgtt aaagaaaaaa
                                                                  2370
```

```
<210> 5439
<211> 1564
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (150)...(820)
<223> similar to gi2645229 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5439
agtgtggtgg aattcgtgaa cttgaagcac ttgcaacttt gtaccagaaa caaaataaat
                                                                       60
atgaacaago tgaacatttt aggaaaaaat cotttaaaat tcatcagaaa gotataaaga
                                                                      120
aaaaaggcaa cttgtacgga tttgcccttt tacgtagacg ggctttacag ttagaagagc
                                                                      180
ttacattagg taaggacaca cctgataatg ctcggaccct caatgaactg ggtgttctct
                                                                      240
actatettea aaataacetg gaaacagetg accagtttet gaagegttee ttagaaatga
                                                                      300
gggagcgagt tctaggacca gatcaccctg actgtgctca gtctttgaat aatctggcag
                                                                      360
ctctatgcaa tgaaaagaaa cagtatgata aagcagaaga actttatgaa agagctttag
                                                                      420
atatteggag aegtgeatta geteetgate accettettt ggeatataeg gtgaageate
                                                                      480
ttgccatctt gtataagaaa atggggaaac ttgacaaagc tgtacctttg tatgaattgg
                                                                      540
ctgttgaaat tcgacagaaa tcttttggcc caaagcaccc tagtgtagct actgccttgg
                                                                      600
tgaacttagc tgttctttat agccaaatga aaaaacacgt tgaagctttg ccattatatg
                                                                      660
aaagagcatt aaagatttat gaagatagcc taggtcggat gcatcctcga gttggagaaa
                                                                      720
cactgaaaaa tttagctgtg cttagctatg aaggaggaga ttttgaaaaa gctgctgaat
                                                                      780
tatacaaaag ggcaatggaa ataaaagaag cagaaacatc actcttgggt ggaaaagctc
                                                                      840
cttcacgcca ttcatcaagt ggagacacgt ttagcttaaa aacagctcat tctcctaatg
                                                                      900
```

```
ttttccttca gcaaggacaa aggtaatagc agcagttaga attctttgca aatgtacctt
                                                                      960
aagacaaaat aattaaacat ttggaacatt tgaatttgaa actttaaaaa aatgttgtac
                                                                     1020
gaaattttac tacgtgtqat ttaactgcta tttgtatgaa gttgtattgg attacattaa
                                                                     1080
gttqqaattq tgattatqtc tgttttagtt gtttaaaaga attttcctat tatatggtat
                                                                     1140
ccaaggatgt agacacatta gaattataag aagacatgag gagcaaatca tgaagagcgg
                                                                     1200
attggtcttt gttcaacaag agctggcaga gtagttaaga caaggagttc aaaaattcca
                                                                     1260
tgaatcttgg ccaggcatgg tggctcatgc ctgtaatccc accactttgg gagggtgatg
                                                                     1320
caggaggatc acttgaggcc aggagttgga gaccagcctg gccaacatgg tgaaaccctg
                                                                     1380
tctctactaa aaatacaaaa aaaaattagc tggacctggt ggcgcatgcc tgtaatccta
                                                                     1440
gctactcagg aggctgaggc atgagaatcg cttgaactca gcaagtggag gttgctatga
                                                                     1500
gctgagattg tgccagttca ttccaccctg ggcaacaggg tgagactctg tctcaaaaaa
                                                                     1560
                                                                     1564
```

```
<210> 5440
<211> 908
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (15)...(677)
<223> similar to gi189044 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5440
agtegtggtg gaatteeett eegtgeetga agtgegacaa gegetteege etgaagggea
                                                                       60
tectgaagge ceaccageac aegeacagea aggagaggee gttetegtge ggggagtgtg
                                                                      120
gcaagggctt caccagacaa tccaagctca cggagcactt gcgcgtgcac agcggggaga
                                                                      180
gaccetteca gtgcccagag tgcaacagga gettecgeet gaaggggeag etgeteagee
                                                                      240
atcagegeet geacaeggga gagaggeeet teeagtgtee ggagtgegae aagegetate
                                                                      300
gegtgaagge egacatgaag geecaceage tgetgeacag eggggagatg éettteteet
                                                                      360
gtgagtgcgg caagggcttt gtgaaacact caaagctcat cgagcacatc agaacgcaca
                                                                      420
cgggagagaa gccttttcag tgtcccaagt gtgacaagag tttccgcctg aaggcgcagc
                                                                      480
tgctcagcca tcagggcctg cacacagggg agaggccttt tcactgccct gagtgtgaca
                                                                      540
agaactteeg ggaaagggga cacatgetga ggeaceageg catecacagg eeegagagge
                                                                      600
cctttgcctg tggcgattgt gggaagggct tcatttacaa gtctaagctt gcggagcaca
                                                                      660
tcagagtaca cacaaaatcc tgtcctgctc caaatgaact ggacattaag aaaacgctca
                                                                      720
gccaactgtt tgcaatgata gaggccgatt ggagttgagg cagagtggga catccaaagc
                                                                      780
gttgagcagg attggtattg cccaggaatc cacagcaaca gtagccagac ccgctggtag
                                                                      840
acgggtttta ggagcaggta tccttctttg agcaagagtg tcatgcaagt taggaatatg
                                                                      900
aagaacca
                                                                      908
```

```
<210> 5441
<211> 2355
<212> DNA
<213> Homo sapiens
```

<220>
<221> misc_feature
<222> (38)...(668)
<223> similar to gil708767 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

```
<400> 5441
tttcgttgat atcttccaga gatggaaaga gtgcagggga aagagccctg cccaggcgga
                                                                       60
                                                                      120
actotoctat otgaataaag ogaagtggot ggaaatgtat ggggtagaca tgcacgttgt
caggggaaga gatggctgtg aatattetet tggactgace eegacaggea tattaatett.
                                                                      180
tgaaggaget aacaaaatag gettattett ttggeetaaa attaccaaaa tggattttaa
                                                                      240
aaagagcaaa ttgacactcg tggtggtcga ggatgatgat cagggacgtg agcaagagca
                                                                      300
cacgitigig ticoggitag acagigodag gaccigodaa caccitigga agigigodagi
                                                                      360
tgagcaccac gcattettee gactgeggae gecaggaaac agcaaateca atagateega
                                                                      420
ctttatcagg ctgggctctc gcttcagatt cagtgggcgg acagaatatc aagctacaca
                                                                      480
tggctccagg ttacgaagaa ccagcacctt tgagaggaag cctagtaaac gttatccatc
                                                                      540
ceggagacat teaacgttea aageaageaa eecagtgata geageecage tetgetetaa
                                                                      600
aacaaatcca gaagtccata attaccagcc tcaatatcat cctaatatcc atcccagcca
                                                                      660
geoceggtgg catecteact etecaaatgt caggecatec tttcaggatg acaggtegea
                                                                      720
                                                                      780
ttggaaagca tcggccagtg gagatgacag ccattttgat tatgtccacg accagaacca
gaagaactta ggagggatgc aaagtatgat gtatcgagat aaactcatga ctgcactttg
                                                                      840
agagactgaa gcatctctct tccattcacc ttcatagttt cattgcattc catgaaaagt
                                                                      900
gtcttggcct cagatggatg gatgtgtttg gacgagtgtc tttaaggagt agtcctgaaa
                                                                      960
ggtgtttttg gtgtccatgt aaatatttga agataaaacc actatagctt gtcataattt
                                                                     1020
actgttgact gcattctcat taaaatgaag gtaaaggctc aggaatcata ttgatgttct
                                                                     1080
gattttaaaa ttggagtcaa agtctatgtt tatcatttta ctatgttcct gatgttcttt
                                                                     1140
gttatttaat taatgggagc aaataaaacc agaagagctt gggaagattg ctcagcatat
                                                                     1200
attectigteg tagaagttga gattgetagg gtecagttte cetagtgtgg cetggaegag
                                                                     1260
tcatttcccc ttcattgacc tcattttccc catctgaaaa gagagggttg gactaagtga
                                                                     1320
tetecaaggt cetttecaac tetaaaatte tgeaatttgt taacatttea ttttgtttag
                                                                     1380
gttgaggaca tacattcaaa ctaattttat cacaaggaaa actgcaatac ccacttcctt
                                                                     1440
gacagagtta ctcctttcag aagctaaata aagtatataa cttattagat gttatataga
                                                                     1500
tacaggggga ctttgaattt cacatcttaa agcagttgag ctactttgaa tttaagcagt
                                                                     1560
cgtactaatc ttaaattgca tagcatttgt tttgatcgaa tttgctgctc aagtatggga
                                                                     1620
ataattttta atgtcttaat gattggtgct gctaacttgc gtgatttcag aagacataat
                                                                     1680
tgtgaataca cactgtcaga attgggggat tggtttttac cctagacttc actcttaaaa
                                                                     1740
agcaacgtgc aatcaagatc atttatggct caaatgaaag catataaggt tttcttgaag
                                                                     1800
ttgtgccaaa gcattctgta gagtaggatg agatggttgt tgccctagtc tgttggtaga
                                                                     1860
accagaaatc aatatgttgt cttttaggtt aaagcttgta ccaaaatatt tatttcccc
                                                                     1920
atticaagee etgagicaaa eattittite tettaataat agaeetgaaa igittitatta
                                                                     1980
gtatttctgt gaaatcagtt gattcttgtg ccatttttgt atatgtaatt gtaattttgc
                                                                     2040
ccatgttagg ccctctaaaa aatgtttgac atcctttgag atattttatt actaaaatct
                                                                     2100
gatctttttt ggctactgca aaaatctatt cagcaagaag gtatcagctg cataccttgc
                                                                     2160
acagtggage tgactaceta taaactetee etaaggeatt tgtttacagg tgtattedat
                                                                     2220
tttagcagac gttctgatgc tcagtgtatg tgctgcatac aaataaatgt gttctgaatc
                                                                     2280
ttttcatctt attgatagca ttttaacaaa tgtgtttcca aggaataaag attattcttg
                                                                     2340
cttttaaaaa aaaaa
                                                                     2355
```

```
<211> 1510
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (96)...(436)
<223> similar to gi4454453 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5442
cgatccgcat ttcccgggtc gacgatttcg taaaactgat cagactgtct cagatcaagg
                                                                       60
aaaagatggc cagagagaag ctggaagaaa tagattgggt gacatttggg gttatattga
                                                                      120
agaaggttac gccacagagt gtgaatagtg gaaaaacctt cagcatatgg aaactgaatg
                                                                      180
atcttcgtga cctgacacaa tgtgtgtcct tgttcttatt tggagaagtt cacaaagcgc
                                                                      240
tctggaagac ggagcagggg actgtcgtag ggatcctcaa tgccaacccc atgaagccca
                                                                      300
aggatggttc agaggaggtg tgtttatcta tcgatcatcc tcagaaggtc ttaattatgg
                                                                      360
gtgaagetet tgaeetggga acetgtaaag ceaagaagaa gaatggagag cegtgeaege
                                                                      420
agactgtgaa tttgcgtgac tgtgagtact gtcagtacca tgtccaggct cagtacaaga
                                                                      480
ageteagege aaagegtgeg gatetgeagt ceacettete tggaggaega attecaaaga
                                                                      540
agtttgcccg cagaggcacc agcctcaaag aacggctgtg ccaagatggc ttttactacg
                                                                     600
gaggggtttc ttctgcctcg tatgcagctt caattgcagc agctgtggct cctaagaaga
                                                                      660
agattcaaac cactctgagt aatctggttg ttaagggcac aaacttgatc atccaggaaa
                                                                      720
cacggcaaaa actcggaata ccccagaaga gcctgtcttg ctctgaggag ttcaaggaac
                                                                      780
tgatggacct gccgacgtgt ggagccagga acttaaaaca acatttagcc aaaqccacaq
                                                                      840
cttcagggat tatggggagc ccaaaaccag ccatcaagtc catctcggcc tcagcactct
                                                                      900
tgaagcaaca gaagcagcgg atgttggaga tgaggagaag gaaatcaqaa qaaatacaqa
                                                                      960
agcgatttct gcagagctca agtgaagttg agagcccagc tgtgccatct tcatcaagac
                                                                     1020
agccccctgc tcagcctcca cggacaggat ccgagttccc caggctggag ggagcccgg
                                                                     1080
ccacaatgac gcccaagctg gggcgaggtg tcttggaagg agatgatgtt ctcttttatg
                                                                     1140
atgagtcacc accaccaaga ccaaaactga gtgctttagc agaagccaaa aagttagctg
                                                                     1200
ctatcaccaa attaagggca aaaggccagg ttcttacaaa aacaaaccca aacagcatta
                                                                     1260
agaagaaaca aaaggaccct caggacatcc tggaggtgaa ggaacgtgta gaaaaaaaca
                                                                     1320
ccatgttttc ttctcaagct gaggatgaat tggagcctgc caggaaaaaa aggagagaac
                                                                     1380
aacttgccta tctggaattt gaggaatttc agaaaatcct aaaagcaaaa tcaaaacaca
                                                                     1440
cagggcatec tgaaagagge cgaggetgag atgeaggage getaetttga gecaetggtg
                                                                     1500
aaaaaaaaa
                                                                     1510
```

```
<210> 5443
<211> 3004
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2227)...(1995)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5443 60 tgtgcagtca gccgtcggca ggttgatggg tccagagtct gtggtgacag ataatttgta 120 aacaccaggt gtttccatca gaactgacat gegggteett cagtgaaget tetagtgeet 180 etgteagtgg aagagaeage aagaceaagt tetteeageg tetgtggeet teteetetag 240 gtttcacctg catgtcaggt atcatttcca attttccttt gtttcagttc tggagcttct 300 gagecaggee titeteaace aceteteetg etgetgaaac ggggatggeg titteeetet 360 ccctgtcctg gactggggtc agactgtgcc ccgaggagaa gcagcagaga ataggactac 420 gtcatgggca tttcgtccac ttatttgggt attttggggg ccacagaaca atcctgacta 480 tectagacte etcagagace teagaggeag etgtgaatgt cectatgttg eegggagtte 540 ctgtttgaaa tatttgaagc atagaggatg ccacaagctg actttcttca tctaccttgg 600 tgatettgaa geaaagaaca gaactgatge teaggeeagg eteacetgta geettaegee 660 gcaagcatac gtgaggcgcc agctctgtcg ctgaaggagc gcttactcag aggagcggtc 720 ggccccctct tggtgttaag gtctcttagt taacctggct ttttggtgca ggtgtgatct 780 ttgaagetea ggeaggteee tgatgeeate etaaggtgag gacaggaace teacceacea 840 tettettage gtgteeetga tgaetetgte etetgttaga tggtegttgt gettetgagt 900 aaaagtacaa cccgactccg ttctctcccc ttcctgcage agagetgggt ccttccctgg 960 tggccgagtc tctcttgcct tagcttcttt ggtcaaagtt ggagaaaagc ttcctgctat 1020 tagtgetgtt acagaacttg acggtttgtg gatgtgagtg tgaatgteec tgtgttettg 1080 ggataacaag agcetttatg ceaattatge actgaactet gtgtageetg gtaatgttta 1140 tetgtteatt tgataatget gattttagtg tgttgeeece eteceeegt taatgtgtgt 1200tgatggtgaa gtccttttga taatgctgat tttggtgtgc tgcctcccc ttccccccg 1260 ttaatgtgtg tgttgacagt gaagteettg ggtggggeea tgtgtgtgtt tgtgatgtte 1320 cttaagttga tgcagcttct aacctctgtg aaaacactgg tcagagtggc ttctccaaga 1380 gctggcagct ctgtgaacta aagcctgcat catttttgtt ctgggattga attctgccca 1440 tgggcatgtc ttctcatagt tgcttgctgg taggaaagaa atgggcgtgg gtgctgccct 1500 ggaagetgag eggaaagttg eetgtggttg gtggaagetg atgagagett gagetggegg 1560 taagaaggag teteceaggg aagtgggaga ggeattaagg tgatggeeag ggetgagget 1620 ccaccagegt gagagggaac atgtgggaac tggcccctgc ccttgattcc tctgcctcaa 1680 agttgggatc tgaaagccat gtagggctag aagaccctga ggctgttctc ccttctgttc 1740 atagtgagac tcaaaaagcc aagtcccaga agttctgaag ggctgtgact agaagtgccc 1800 aggtccttca gggagcttta agaatgaccc cacagaactc aagtttaact aggggttagg 1860 teccagatte agaeccagga gittataaaa aigageteta ettecagitt iggittaaat 1920 tacacateca ggecaggeac agtggeteae acetgtaate ceageacttt gggaggecag 1980 tgcgggcgga tcatgaggtc aggagtttga gaccagcctg gccaatgtgg tgaaaccctg 2040 tctcttccaa aaatacaaaa attagctggg cgtggtggca cacgcctgta atcccagcta 2100 cttgggaggc tgaggcagga gaatcgcttg aacctgggag gcagaggttg cagtgagccg 2160 agattgcgcc accgcactcc agcctgggtg acagagtgag actccgtctc aaaaaacaaa 2220 aaggtgacac atccagctet ttetecaggt caetgegetg gaggacagat gtgeegtett 2280 gtcctgcctg tttcacatca gcataggatc aaaggatgac aatgctgaca gcttctgaag 2340 ccgaactcaa cagteteata ggeteeteae ttgteaetta ttttteeeta geteeeteaa 2400 cogcaccoca tocotttaga togtgogtot gttttagtga ototgacacg atgeogtoct 2460 caccttccaa atacccagtt atttattcaa gaggggggaa gtgggtagag gatgggatgt 2520 tttggaagca ctttgcaagt taccactate tgaaaateee etgetgttge ggggagaage 2580 tttgaatgca ctgaagagaa ttccttctaa atgaaggcag gtgatagtgt tctttctgta 2640 agtaaaggga aagaaaaaa acatagtttg cttaccaggt ggagacaaga ttcaagacat 2700 agcagaagag tggaagacaa atattttcca cttaaatgag gctgtttttg acgttctctg 2760 ccaaggattt agagettteg ttgaactaac ataaaaggag tgegagtett agtagagatg 2820 ttccgtgtgt gccgccgtg ctctgaactg cgtttccacc tgctgtggtg cttgtgcagc 2880 ctggcagttc attgtcatct ttaataaact aaggaaataa aattctgtct ttcgtcagcc 2940 tgccttgact gtcaagaaat ggcatgtgtc cactgtaaag caggtatatc tgaacattga 3000 gaag 3004

```
<210> 5444
<211> 384
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(352)
<223> similar to gi4512282 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5444 tttcgtctta gctgggtttt ccttgttgct attttaaaag gtgtccaatg tgaggagcag 60 ctggtggagt ctgggggaac cttggtacag ccagggcggt ccctgagact ctcctgtaca 120 gcctctggat tcacgtttgg tgattatgct atgagctggt tccgccaggc tccagggaag 180 gggctggaat gggtaggttt cattagaagc aaaccttacg gtgggacagc agaatacgcc 240 gcgtctgtga aaggcagatt cagcatctca agagatgact ccaaaagcag tgccttcctt 300 caaatgaaca acctaaaagc cgaagataca gccatgtatt actgtactag atctaaagaga 360 tttctggctt accactttga ctcc 384

```
<210> 5445
<211> 798
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(799)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (216)...(501)
<223> similar to gil616675 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5445 tttcgtggaa ttacgcccga gtggagagtg tggaccgtga gtgtgggtat cagggagggc 60 tggatggagg cctgtgggtg ggtgaactgc gtcctcctag ctcagccccc aggaagctga 120 aagcccacga ggaaaaaatg tgggtgtcac tgggcaagat ggggataata ggaggcccat 180 gcaggaggca caagagccca accaactgtc ccatttttgc cctgaccttt gccctggtag 240 tectggeett tecegeetae etgetgggea ttgacagegg gegaetgeag gagaagetga 300 ccagccgcaa gatggacagc cgctggggcg ggcgcagcga gtccatcaat gtgaccctca 360 acgtggagca ggcagcctac acccgtgatg ccctggccaa ggggctctat gcccgcctct 420 tegaetteet egtggaggeg agtggggetg gggetggaag geagagtgga tgetetgggg 480

```
tcacaaacat ttatggaage tgagtgcagt ggctcacgge tgcaatcca atgccttggg 540 tggctgagtt gggagcattc tttgaggcca gaagttcaag accagcctgg gcaacatage 600 aagacccca tctctacaga aatttcaaat tagctgggtg tagtggtgtg catgtgcagt 660 tccggctact cagagggctg aggttggggg atcacttgaa cccaggaggt tggggctgca 720 gtaagctatg aatgcgctat tgtactccag cctggacgaa atcgtcgace cggccattgn 780 nnnncggtcc ggcaggcg 798
```

```
<210> 5446
<211> 1173
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (27)...(444)
<223> similar to gi2746866 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

60 gagcatetgt etecaggaac gtggteacte acctgtgetg ggteeceaga, gaaccataca 120 tactacagac ctctgaagat aaaaccctca gattatggga cagtcggggg ctgcaggtag 180 ctcatatgtt tcctgcaaag cagcacattc agacctactg tgaagtcagt gtggatggac 240 acaagtgtat ctcctgcagc aatggctttg gaggagaagg ctgtgaagcc acgttgtggg 300 acctaagaca gactegaaac agaatatgtg agtataaggg gcatttecag actgtegcat 360 cotgogtott totaccaaga goattggcot tgatgcottt aattgctacc toatcacatg 420 attgcaaggt gaagatttgg aaccaagata ctggagcctg ccttttcacc ttgtctctgg 480 atggatcagg accettgact tetetggetg ttggtgacge cateteetta ttgtgtgcaa 540 gttttaacag aggaattcac ttactcagaa tggaccacag ccaagggctg gaactgcagg 600 aagtggcagc attotgaggc caagagacac toactggaca atatcaaacc atggctcctc 660 ctcagcatgg ctttgtgtct ttcccagtta tcttgagggg agtgggatgt agggctggta 720 ttctttgctt aggttcattt acaagatgta tcagtgttgt aagtccaata atttaagtcc 780 agtgattcaa aatcaggtat agagtccaga aacatggact acacataagg ttctctattt 840 aagttaaata caaatgcaac tttttagtga gcttttagga ctactcttca aaaaaagtgt 900 attgctcaga atgatgacct gtaaatgtaa gagtggcagg cctctgtctg tgaaagtcag 960 aacacagggc tcgagcctct ggaactgacc ctttgcaagt ctttacaaaa gaaaaaaggc 1020 agtggggaga gagagtgttt tggttacatc aggaaataat tgagatggga aagaatagtg 1080 cagetecata gaggagaegg actgtagaea atgagattaa getteagtea etgetettea 1140 gcaatgtgaa gaatcaaagt cagggcctgt att 1173

```
<210> 5447
<211> 463
<212> DNA
<213> Homo sapiens
```

<220>

<221> misc_feature <222> (13)...(362) <223> similar to gi15061 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5447 ctegetgeag gaatacgeec ggcatttege gggegatatt tteacageta ttteaggagt tcagccatga acgcttatta cattcaggat cgtcttgagg ctcagagctg ggcgcgtcac 120 taccagcage tegecegtga agagaaagag geagaactgg cagaegacat ggaaaaagge 180 ctgcccage acctgtttga atcgctatgc atcgatcatt tgcaacgcca cggggccage 240 aaaaaatcca ttacccgtgc gtttgatgac gatgttgagt ttcaggagcg catggcagaa 300 cacatcoggt acatggttga aaccattgct caccaccagg ttgatattga ttcagaggta 360 taaaacgaat gagtactgca ctcgcaacgc tggctgggaa gctggctgaa cgtgtcggca 420 tggattctgt cgacccacag gaactgatca ccactcttcg ccc 463

<210> 5448
<211> 862
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (863)...(523)
<223> similar to gi4490653 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5448 tttttcacac atgcagggag ttgtattaca ggaggggtaa cactgagctc agggactcca 60 ctgcttttat agcaaacagt aagcaagctt gctctctgtc ctgatgggag acatcccatc 120 atttttcaag gttgcttgct gcaacataac cctgagaaat gtcttggata aagagtggtg 180 agageettge attettggea taettageaa ggtgtgtagg agtacaagag eetcacagaa 240 aggageetee caatagatat getetgtgaa atgateagtg eteteteatt eeatgeegat 300 gaccaacact tattaaaaaa cagttgatca agtaattcca gtgaaagaag aggatctctg 360 gaagtaataa aaattgctcc cttaattcat tcttctttt tagtgccttc tgtctagtgt 420 tttttcaacc ataaaatatt ttttctttag gctcttcaat tttcttctaa aataataaaa 480 ttgtetttea tgggeetetg atgaettaae tteettttt tettaggtag teteecagge 540 tetetgtgge ttecacacag atgetaggat acatgecete agtgtaagtt getaccagaa 600 gatacagatg ggtcttcacg acaaccacac cagtgttctc atttttggca taaaqagaat 660 atteatetge ceggaeacat etgtaatett tteeettgaa atacagteet tetetteggg 720 ettgcaaagg gttettggca aatecattea ceagtgtteg gacateaetg ggegttaeat 780 tgaaacctgg tgatgctaca cacaagctcc gctcctggat tttgatgagg gctgcactgt 840 ccacatgctt ggttcccaag ag 862

```
<210> 5449
<211> 502
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (505)...(57)
<223> similar to gi145908 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5449 caggaattta gttgccgttc ttcccgcctg tcaggggcgg gtttttttat.atctcagata 60 aatgcaaacg catcgccaaa caggcgatct tcccgcgcat tacgctcact gcaaaacaga tegegggeaa tittegeeat eteaaaaegt eeggeaatat agatateatg etetgeeage . 180 gtaccgtgat cetgcaatac cgccgttaac acggtgccag tacgcccacg ccagcccgct 240 teeggttgtt caaccacegg caccacttge agaccaggat getteaacga aagegeeteä 300 agctegeaga gateatacag atgetgetet teaegeeege eecagtaaat ggtgatatea 360 cggtttgggt tacgcgccaa cgctgtcagc aaaatcgagc gggcataaga gaacccggtg 420 degeoogeaa teaaaateat eggaegetet teateatege geageeaege tteteegtgg 480 ggaatgtcga ccacgatttg at 502

```
<210> 5450
<211> 2873
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (305)...(1555)
<223> similar to gi468355 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5450
teetgeegeg eeggeageea caggetggea tageggetge egaeeegeee tegtteetee
                                                                       60
accecetgea egggaetget gggeeegeee egeeegeet geaggtgaag eggeegeage
                                                                      120
cgccgagtag gtgcgtgggg atgatctcac-tcgcgcgctc cgcgccagga ggaggaggag
                                                                      180
egggagegga tecaaettee gggtagtgga geegeaagee aeeggeatet tgetttttet
                                                                      240
teccecteet cetgtgtgee eegegeeget ceetetttee ettttattee eggeeeeace
                                                                      300
cgccaaaatg aacagctcgg acgaagagaa gcagctgcag ctcattacca gtctgaagga
                                                                      360
gcaagcaata ggcgaatatg aagaccttag agcagagaac cagaaaacaa aggagaagtg
                                                                      420
tgacaaaatt aggcaagaac gagatgaagc cgttaaaaaa ctggaagaat ttcagaaaat
                                                                      480
tteteacatg gteatagagg aagttaattt catgeagaac catettgaaa tagagaagae
                                                                      540
ttgtcgagaa agtgctgaag ctttggcaac aaagctaaat aaagaaaata aaacgttgaa
                                                                      600
aagaatcagc atgttgtaca tggccaagct gggaccagat gtaataactg aagagataaa
                                                                      660
cattgatgat gaagattcga ctacagacac agacggtgcc gccgagactt gtgtctcagt
                                                                      720
acagtgtcag aagcaaatta aagaacttcg agatcaaatt gtatctgttc aggaggaaaa
                                                                      780
```

```
gaaqatttta qccattqaqc tqqaaaatct caagagcaaa ctcqtaqaaq taattqaaqa
                                                                      840
                                                                      900
agtaaataaa gttaaacaag aaaagactgt tttaaattca gaagttcttg aacagagaaa
                                                                      960
agtottagaa aaatgcaata gagtgtocat gttagotgta gaagagtatg aggagatgca
agtaaacctg gagctggaga aggaccttcg aaagaaagca gagtcatttg cacaagagat
                                                                     1020
gttcattgag caaaacaagc taaagagaca aagccacctt ctgctgcaga gctccatccc
                                                                     1080
tgatcagcag cttttgaaag ctttagacga aaatgcaaaa ctcacccagc aacttgaaga
                                                                     1140
agagagaatt cagcatcaac aaaaggtcaa agaattagaa gagcaactag aaaatgaaac
                                                                     1200
actecacaaa gaaatacaca aceteaaaca geaactggag ettetagagg aagataaaaa
                                                                     1260
ggaattggaa ttgaaatatc agaattctga agagaaagcc agaaatttaa agcactctgt
                                                                     1320
tgatgaacte cagaaacgag tgaaccagte tgagaattea gtacetecae cacetectee
                                                                     1380
tocaccacca ettececete caceteccaa tectateega teceteatgt ceatgateeg
                                                                     1440
gaaacgatcc caccccagtg gcagtggtgc taagaaagaa aaggcaactc aaccagaaac
                                                                     1500
aactgaagaa gtcacagatc taaagaggca agcagttgaa gagatgatgg atagaattaa
                                                                     1560
aaagggagtt catcttagac ccgttaatca gacagccaga ccgaagacaa agccagaatc
                                                                     1620
ttcgaaaggc tgcgaaagtg cagtggatga actaaaagga atactggcct cccagtagca
                                                                     1680
ttggatgcag gaaaaaatac attgacggtg aaaaacaagc cgaaccagtt gtagttttag
                                                                     1740
atcctgtttc tacacatgaa ccccaaacca aagaccaggt tgctgaaaaa gatccaactc
                                                                     1800
aacacaagga ggatgaaggc gaaattcaac cagaaaacaa agaagacagc attgaaaacg
                                                                     1860
tgagagagac agacagctcc aactgctgat ccataaacca gaagcctgac atgtttggaa
                                                                     1920
gtccttttca ataagcacat gattagtgtt gttatattgg caagggctgt aaacattctg
                                                                     1980
ctctggtcac tgtattcaga atacaggttc ttttctggtg tcacttttgt aagtagcaac
                                                                     2040
tataaacata agtaagctgt ttagcaaaac acacattcct agtaggtttt ggttttttga
                                                                     2100
totttataaa gatgaggttt ttttootagt taotgtatta agtatgactt ottttagaag
                                                                     2160
gttacaaaaa aattcagatg ttgatacctt tttaggaaat gtgcatacca ctcatcaaat
                                                                     2220
ggaatgctga aagtttgagg tgcttgtata taatcggata aacaaaactg atcaacccaa
                                                                     2280
tgtgatttta aaagccccca aagaagcttc tgttttgggt ctgatcctct tgatggagaa
                                                                     2340
actgcagcag catggaaatt gttgggtact gtggcataca agttattttc tacagtagac
                                                                     2400
tgagataaac tgaaaactca ggagctggca tcaaactcgt agtcccatag tcagtgttaa
                                                                     2460
ttacacacat tgttaactat tggatgaaaa atacatgcta ttgattgtgt ccaaagcctc
                                                                     2520
ccgaggacct ccgtggggat gctctggtag cctgaataca gaactgaggt gaaaqtccaa
                                                                     2580
accttgaatt ttacagtagt aagttggtaa accatgtgct ctgtgctatg agttaattat
                                                                     2640
gttttcccaa atactaatgt ggcacaagta ccatatttta tcagagttct tatgtacagt
                                                                     2700
atggtgaaga taagtgacaa gcacacattt ttettgette actgetgtte tatattacae
                                                                     2760
aggtttgttg ttgttttttt taaaaaagaa attaagcagt agttagtctc taaaaataca
                                                                     2820
atgtttcagg ctaccacagt gaataaatag aaatgtaatc agggattaaa aaa
                                                                     2873
```

```
<210> 5451
<211> 1809
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1681)...(562)
<223> similar to gi442368 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 5451
caacacgcgg gcgataagtt tgtttctttt aaacggcgcc cccttttttt tttttttgtg 60
gattttcctt ttaatgcaaa atgttgcaat acaaaacaat gtggagaaag tcctgttcct 120
```

```
caggacactg aagggaggag tgaggaagag aggacagagc tggacgtctc ctcctatttc
                                                                      180
tecetececa agteactetg aggggaagaa caetgetgee tgetecetgg geetgeeege
                                                                      240
atacaaggtt agagccctgg gtctggggca tccttagcct gaaatttgtt gacatggggc
                                                                      300
aggagagcag gagggaacat tgagggtttt gactettegg getetaaaag gattaeteag
                                                                      360
gatctggagt tccgtatgaa acaaaggagc tgaaagaatt tgattgccat tggctaaaaa
                                                                      420
tatagaggat ttgagccaca actggcccac atttgaagaa tgaggaacaa gaaatttagt
                                                                      480
ggggatataa tataaatgta tgggagtgag aaagatgcaa aaaacaaggc tagctcctca
                                                                      540
aacctcctcc tctttcttcc tcatctccag cttatagaca atctggtagc catcatccca
                                                                      600
                                                                      660
ggcatagage tggcgttctc gggggttata gcggaggetg gcatgggcac catatetgcg
gggaaaataa gggagtgctg cccgttcagg ggtcagggtg ccgctggcat caaaggagca
                                                                      720
                                                                      780
ctggatgegg geeegactgg caggacgggt gttatagaeg acatagaggg teccacagat
                                                                      840
gacaaaggca gcctcagcat tctctctggg acatggtgtg tcccactgct gctctgtgtc
cagtgtctgt ggatctaact tggccagaca caagtgcctg tcatcctccc gggtggcata
                                                                      900
gacageceaa agacetteet cateagetge caggtegatg taggtgtetg etgteaagee
                                                                      960
gtaggggggg atcagcccct ctgctgggaa tactgagctg tccaccactg ttcggtttgc
                                                                     1020
caggtggaat ttgattagct gcaaagtgtt ctccatctca ccacctccac caggtcttcc
                                                                     1080
aggaggeete egageaaaat aaagaaagee accatatace agetgeeetg tgeetaceea
                                                                     1140
ggggaagggc acceggacte gggaagettt cegggeagee atggeaaggg tgaagteaeg
                                                                     1200
cageettggg aagacaaagg etgtgteatt etgtgteeca tetaacaegt agatettete
                                                                     1260
tgtttgcccc agtggatcct tggtccatag accagctggg ccaccaaatc gcttcagaat
                                                                     1320
cttcattgat ctcacttgag agattgtgta gccacagtct gtcaccatat cgtacttctc
                                                                     1380
attecttett ceettgeett tggteecagg geetecagte acetteteat caaactetae
                                                                     1440
acagggcaga gctgggttct gggtctccag atagtctacc tcccgctcca gacgatccac
                                                                     1500
teteceggag atggtgtegg ceteagitet gagtgeetee egeteettet etgecaeete
                                                                     1560
cagcagtggc agcatcttgt tettgaagte cegcagetea geageatgee gactactetg
                                                                     1620
gtcctggcac tgggccagcc gttcctctaa agcagctagt cggcgttcca tgtactccac
                                                                     1680
aaggtggtgc tgctgtcctt ggaggggtcc cgaccatgac aaaaggaaca agatgaggag
                                                                     1740
aggggtgctg ggccccatgg cagcctggag agtggtgcca gagtagaagg aacgtacagt
                                                                     1800
cagcctctt
                                                                     1809
```

```
<210> 5452
<211> 587
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(588)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (587)...(109)
<223> similar to gi567205 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5452

ttttttttt ttattgacat ttcgatctaa gtggtcataa accagatagg tagttttatt 60
aaaagattta ccctaagaac actccttcta ttcccatttc tgacatccta cccacacca 120
cattcatcga ctaccatgtc ttcataatgt cgtagaatga cattgtcatt attgtcctgg 180
```

```
tagagcatgg aaatgggaga cagcttggtg gggatacaca cagcctgggg gatctctggg 240
tcaacggcat gcatcagggc ttgcatgaaa gcataattgg agctgttgag agagatggtc 300
agtgagaagg gacactctcc atggcagtaa tttgccatga accccttggg ggcaatgatc 360
cacttgtgcc aacccaggtc ccggaagtta atgaatagct ggtgacggtg gcagaggttc 420
ttacaagaaa gcttggggac agggatggct gctctccttt tccgagaagg gtggcactga 480
tcagggttga gagtcaccac cagcagggaa gcatgaaggg agcatcttag tctggcacag 540
gtgtcttcag gctgaaaatt cacccctgag tcncnatctt ctttgac 587
```

```
<210> 5453
<211> 598
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (601)...(87)
<223> similar to gi1651355 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5453 ctacacgacg gtattcattt aggcggaacc atcctccatg tgcgtatcgc cagcggcgtt 60 gatatgggtc agttgcacaa tacttatttc ttcaaatgtg gatggaaatt acacggacgc 120 gtacgggcat ccagctgcgg cgcgatgata ttttcccatg cggtacggca cgctttgqtc 180 gaacceggca tggcgaaaat cagegttttg ttggcgaege cegetacege acgagattge 240 aacgtggaag tgccaatctc ttcaaacgac aacatccgga acacttcacc aaaaccttca 300 acttcacggt cgaacaacgg cagcaatgct tcgggagcct gatcaccttc cgtcaggcca 360 gtaccacceg taatcaatac cacttgtaca tegtegetgg egatecaege agatacetga 420 gegegaatag egtageggtt ttettteaca atggetttat egacaaegtg atggeeeget 480 tettgegeeg aategegeag atagtgaceg gaggtategt ettetteace gegacgatta 540 gaaaccgtaa gaatagcaat acgggtcggg ataaattcag tgcttacctg actcatct 598

```
<211> 454
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(179)
<223> similar to gi2367275 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5454

<210> 5454

```
tgcggtctgc ctggtgaaat aaaacaacaa ctggaagagc ttgaaagcga ctggcgcaag
                                                                       60
caacacgctt tattcagcga acagcaaaaa tgtctgttta tccctggcga ctggttaggt
                                                                      120
cgcattgaag ccagcctaca ggatgtcggt gcacagattc gccaggcaca acaatgctaa
                                                                      180
cgctggatac gcttaatgtg atgctggccg tcagcgaaga gggattgatc gaagagatga
                                                                      240
tcatcgcact gctggcctca ccgcagctgg cggtcttctt tgaaaaaattc ccacgcctga
                                                                      300
aggeggeaat cactgatgat gtteeceget ggegtgaage getgegeagt eggetgaaag
                                                                      360
atgecegagt ecegeeggaa eteacegaag aggtgatgtg etateageaa agecagetee
                                                                      420
tctccacgcc acagtttatt gtgcagctac caca
                                                                      454
```

```
<210> 5455
<211> 2177
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1577)...(813)
<223> similar to gi2736345 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5455
ttttttttt ttäaatacaa atgttttatt acgcaaacca catgtaggtc ccaggctcag
                                                                      60
gggettacce tacagecede actggteect ggetecaage etgeteettg ecettgeeca
                                                                      120
ccctggaaag ccaggatctc ctatggagtg tgtaggtgtc cacgagtgta ccggtgtgcg
                                                                      180
ggcctcctgg gctgcaggca ctcaggcatg gtggcagcat tgagggaaag acaggtgttg
                                                                      240
gggagcgggg tececacetg eccaggetea ggagteacag gggtetgeac agteetttet
                                                                      300
gctgtggaac acgtgataga tgctggtcgg ggggaacata gcaacagcgc cgagcagaga
                                                                      360
geccaectgg atggecaege eggetgecag caatgeegge eggeceeege catgeageag
                                                                      420
ggagetgget gecacettea egtaggagaa caegecaaga caeageacee aegacageae
                                                                      480
cacgaggacc accccgccg aggtgcccac caggggcggg caggggctca ggactgccag
                                                                      540
cgccatcagg tagccccac agaacacgcc cagcagagag aggccgccca gccctgccaa
                                                                      600
ggacetgeae ageacaceca tggecaggaa geaggecagg ggattggeag caetgeceag
                                                                      660:
caccacagec aggtggtagg ccagacgece gtagggtaag caggaaaage tetgcacgge
                                                                      720
aggcagcacg ccattggtca gcgcgttggt ggcggccaac aggcccagca ggcaggcact
                                                                      780
gcgggctgat agaagctgat aggccttagg gtctggacca ggggtggtgc ctgctgcctg
                                                                      840
gettggtgge tettgeagtg gtgaggaete ttecaeetet teetetgete etggggetee
                                                                      900
cacctggagg cctgatccta actcccctgt gggtacagat ggtggtggcg gcaacagcag
                                                                      960
cagaagaccc tggaaggcag cagctgaagc gaccagaagg gcagtcagtg cccagaagaa
                                                                     1020
ggtgctggcg ggaaaacgct caaggaagtc gagcgggggg ccaggggtgc cgttgatggg
                                                                     1080
ggctggcggg cactcgaggc ggcccacacc ctgcactagg gccagcagcagcag
                                                                     1140
ggcactcagg cettgaceca ggaagaatga cegtaagaag egaggtggca ggtggeteaa
                                                                     1200
gaagggcagg aaagtgacat togaggcaca gcatgccagt gccagcacaa aggccagtgc
                                                                     1260
taagaaggee acagaatgea actgteetge caetggggee acatggtgee acagagagge
                                                                     1320
cagcaggget gtgcccacca tgcccagcac ctgcaccacc cggatgggga cctgctcgtc
                                                                     1380
ctttcctggg gccagcctcc tccagagggt caccaccagc agacccaggt tccccagagc
                                                                     1440
cacaagcaca gagacgtaag aggggagget ccaaccetet ggaagetett tgaccaccac
                                                                     1500
aggtagetee acceagatee cattgacege ageceaggag cecatgeega agagagecae
                                                                     1560
cagcaggtgg gtcagcaccg gacgggcggg cgtgggtgct gccattcagc ccaaggctgg
                                                                     1620
geocttecag gteagggeaa aggteacage cagttetttt eccaectagg gecagacacg
                                                                     1680
ctttggctct cctgggaagt gaagactttt tctagccagc gggaccgccg gcaggcaggg
                                                                     1740
```

```
aaqcaqqaaq ccqqcccqaq tcqctgcggc cccaqqqqaq gaggccgaaq qaqcqaqtgg
                                                                     1800
                                                                     1860
agecetecte tecagggaga ggeggggetg gagteaacge caccaccacc ceaageegga
                                                                     1920
cqccgggaaa qqgcgcctac caqgaggagc cacgcacacc ccagggcttc acqqtgcccg
cgaccgcaaq aqccaagtca qatcccaggg gagtggccgg gacggctctg ctcqqagggg
                                                                     1980
egeogecete teggtacegt caggtgggeg actegggage egteoggtee etgegeetee
                                                                     2040
eggteeegeg cecagtgege teeegeteea gtgeeggett eeegeeaege egggaeaeeg
                                                                     2100
ccgtccggcc cagggacgcc acctcagtcc ggagcgcgca ggacccggca gcagccacga
                                                                     2160
cccgactcac ccgtggc
                                                                     2177
```

```
<210> 5456
<211> 1228
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (19)...(1004)
<223> similar to gi3327222 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5456 ctgcaggatt cggcacgaga atacagcgag ctcctggaca aggcttcgga aactgatgat 60 ccatatgage geatggttet egttgeegea tttgeagttt caggatactg etecacetat 120 ttcagagcag gaagtaagcc attcaaccca gtccttgggg agacttatga atgcattaga 180 gaagacaagg gatteegett ttteteagaa caggttagee ateateeace catttetgee 240 tgtcactgtg aatcaaagaa ttttgtgttt tggcaagata tcagatggaa aaacaagttc 300 tgggggaagt cgatggaaat cctgcctgtt ggaacactga atgtcatgct tccaaagtät 360 ggagattact atgtgtggaa taaagtcacc acttgcatac acaacatcct cagtgggaga 420 agatggatag aacattatgg agaagtaacc atcagaaata ccaaaagcag tgtttgcatt 480 tgcaaactca cattigtcaa ggigaattat tggaattcta acatgaatga agiccagggg 540 gtggtgatag atcaggaggg gaaggcggtg taccggctgt ttggaaagtg gcatgaagga 600 ctctactgtg gtgtggcccc ctctgcaaag tgcatttgga gaccaggttc catgccaaca 660 aactatgage tgtactatgg etteacaagg tttgetattg ageteaatga gttagateea 720 gtactaaaag atctccttcc accaacagac gcccggttcc ggccagatca aagàtttttg 780 gaagaaggaa atttagaagc tgcagcatca gagaagcaaa gagtagagga actccagaga 840 teteggagae gatatatgga agaaaacaat ettgaacata taccaaaatt ttttaaaaaa 900 gttattgatg ccaatcaaag agaagcctgg gtttctaacg acacctactg ggagcttcga 960 aaggaccctg ggtttagcaa agtagacagc cctgttcttt ggtagactgg gaatgtagag 1020 ctagccaaca tatcacattc tgaatgaata aataactatq cacaattatq tttcttataq 1080 ctatgtgtgg tttctgggtc-gactgaaaac ctaccatttg cttttctatt catctttata 1140 atggaettte agaagtgeat tagacaagge ceetaaceae tttgggatee tttetqtttt 1200 gctgcaacca tattccttaa aaaaaaaa 1228

```
<210> 5457
<211> 1833
<212> DNA
```

<220> <221> misc_feature <222> (1834)...(943) <223> similar to gi4680693 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

```
<400> 5457
gtaatgatgc tacctgtcat ttctgagact ggtttgtgtc tttcgtgttt ttttctgatc
                                                                    60
tqtctqqcta gaggtttacc aattgatttg attttcctca aacttctggt tacaatgatt
                                                                    120
ctctctctct ctcttttcct gattatatta atttctgttc tgatctttgt ttcctttctt .
                                                                   180
ctgcttactg gattttattt gctctttttc tggtttctta ctgtaaaggc agaagtcatt
                                                                   240
gatttgcatt gatttgagac ttetttteta atgtaggeag taagtggtgt aaatteeett
                                                                   300
ttagtatgac tttagtggca tctcacattg atatgttttc aatttcattc agtttatttt
                                                                   360
420
ttacgcaact caaaatagaa gcgtatctgt tgtacaacat gggtagtaat tgactataac
                                                                   480
tggagattta ttatattcta atacagatca tttataaatg caatttcttt attaaaaagc -
                                                                   540
ttccaccttt ttgtttgttt gtgtacaatt tgcaaaacta ttctgaaagc ggaatatatg
                                                                   600
tgcacaagtc tgcaaagagt gcaaatttag gatatggtaa atgctttaca agttactttc
                                                                   660
aaaaaactgt ctgccacaac tgagccttta cattgtcatc ttttttgatc aaaatatttt
                                                                   720
gatgccagcc ttccttccac tgccctaaac tataaagcat tttttaatga gttgaaatta
                                                                   780
aggaaggact acccctacta gaaaaaaaga gaagaaagtt ctattagttt gaggtttcag
                                                                   840
aatccccca aaccaggacc agtatcgtgg taaaggctag gctgggaccc cggacagagt
                                                                   900
atgagaatgt gcaggtggca tccctgagga ttcagagctt cagtggaccg tgagtgctcc
                                                                   960
agetgeataa eteaetgaae tgtettgeea gtttetaeae tggetegaet gggeataatt
                                                                  1020
caaaaacgaa aaactcatat tcattccatt cttctggagc tctgtgatag catttaataa
                                                                   1080
caccccaatg ggatgtette cacatatagt attatggtat ttetteaagt aattgetaaa
                                                                  1140
agatacaggg tctaattgtt ctataatact catacccatt ttatctagat gttcaatgga
                                                                  1200
totataaato tocccotggg attoatoata gtaactgtaa cggaacottt gaccccaatg
                                                                  1260
gcagaaatca gaagaaacca:caaagagatt actaggatcc gctagatatt tactgaagag
                                                                  1320
ttttccgaat tcctgttctt ttgactcact cagageteca accagtacag gaataatggt
                                                                  1380
aaactcatec ttatggettt ceatggettt agetgtataa ggeaaatgea ttteaataet
                                                                  1440
gtgttcatct tcatctgtct gcagagacat gcgttcaaac attcctgtct tccacagttc
                                                                  1500
teegtaaate tittggicaa taegaaggic ataeagaggi gieetatata taiceacaet -
                                                                  1560
ggaaagtgca catcgagaga ggggcacatg atgagaaggc ccaaggatga aaattctccg
                                                                  1620
ggtaatagac ggatccactt gtttataagc atgggcagca caagacccac agtacgtata
                                                                  1680
tectgeatgg ggggeaataa tggetetage aggtettttt gtagaetgta ettgtgaaag
                                                                  1740
ccaaccttct agetgtgcat teagetgegg teetgagget gtgtaccage teeeggegtg
                                                                  1800
actggcttct cggcagacca ctcggttgga cat
                                                                  1833
```

```
<210> 5458
<211> 970
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (239)...(603)
<223> similar to gi399711 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5458
ttgcggaatt cggcacgagg ccgactacaa cagattggag ccatggcttt ggaacagaac
                                                                       60
cagtcaacag attattatta tgaggaaaat gaaatgaatg gcacttatga ctacagtcaa
                                                                      120
tatgaactga tctgtatcaa agaagatgtc agagaatttg caaaagtttt cctccctgta
                                                                      180
ttcctcacaa tagttttcgt cattggactt gcaggcaatt ccatggtagt ggcaatttat
                                                                      240
gccaaacatt aaaatatete gacceetaaa agttetgete acagtegtta tagtttteat
                                                                      300
tgtcactcaa ctgccttata acattgtcaa gttctgccga gccatagaca tcatctactc
                                                                      360
cctgatcacc agctgcaaca tgagcaaacg catggacatc gccatccaag tcacagaaag
                                                                      420
categoacte titeacaget geeteaacce aateetitat gittitatgg gageatetit
                                                                      480
caaaaactac gttatgaaag tggccaagaa atatgggtcc tggagaagac agagacaaag
                                                                      540
tgtggaggag tttccttttg attctgaggg tcctacagag ccaaccagta cttttagcat
                                                                      600
ttaaagctca tccataataa ctccgggacg actgactaca caaggagaga atggtgattg
                                                                      660
gcatttacct gtcatacaga agcaagagca atcaaggcat agtccacgtg gctqaqtccq
                                                                      720
ctgacagetg gcaaaaacaa gttccagaga ccctcgactt tggccatttc ctgtcaaggt
                                                                      780
gatgaacatg ccagagtgac cataatttac caggactcac agtagtttat ttctttttt
                                                                      840
aaatattggt atttatgatc.tttgaaattt aaaaacactt atggagttat ttattttact
                                                                      900
gtatteteca gtgageaaaa ecaagttett attaatteat tataaateaa eagtttaaee
                                                                      960
attaaaaaaa
                                                                      970
```

```
<210> 5459
<211> 1329
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (146)...(284)
<223> similar to gi6013425 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5459
tgeggaette egaegaggag gagggetggg tegecagtgt gaeaggagae tgeaaateee
                                                                       60
ttttgtgaaa ggagaactgg tactttgcgt gaggttaaac ttcacaaacc gctgctcaga
                                                                      120
aatctgctat tttccttctc ttttaggact ttatggacag cagcctgcta accaagtcat
                                                                      180
cattegagag egetategag-acaaegacag egacetggca etgggcatge tggcaggage-
                                                                      240
agccacgggc atggccttag ggtctctatt ttgggtcttc taggggcctc aaggtcttga
                                                                      300
tgtgcatagc ttctgataac cctgtgtgca ataatatgat ttgcaqqqca tttctqtttq
                                                                      360
tgacaaaagt ttttaataat agttttaatc attcctttga aagtagtgat gtcataattg
                                                                      420
tactaatcca cataagtacc acagagaagg gtttgaactg tgctattttg ttcaaatgtt
                                                                      480
gacteteegg gggeactgge teatteeaag actgttettg tgcaactete agaatacett
                                                                      540
atttgagcat acctgttttg aaaggcattt tetttttaga gttaggtgta gtgettaagg
                                                                      600
gttaatttat tttcatgtta tgccagtaat atagtgttgt atgcctattg agtgattgtg
                                                                      660
gcaagaaaag ctacagcttc tttgcgttta actttttcaa accacagacc agaactggtt
                                                                      720
gcatgttact ttaggagttg tgggttggta ageteceagg tactteeega ggetatggtg
                                                                      780
tgagagecee egteetgeee tetggggete caeaggeeee tggeaaggee gatggeteag
                                                                      840
```

```
900
gatgatgggg cacagecege etttgaacaa teatgettea gaaatetgee tgaceetage
tgctgctgct ggctcacttt attcttgtat ggctttggta ggcatacttg gagaacatat
                                                                      960
                                                                     1020
cccacattag ggaattgatt taagcctgag agtttgaggg ctttaatcct ttaaaacttg
gagaagetgg etgggeegeg ggtgeteaeg eetgtaatee eageaetttg agagaeegag
                                                                     1080
gccgggccgg atcacgaagg tcaggaagat cggagaccat cctggctaac acggtgaaac
                                                                     1140
cccatcttct actaaaaata caaaaaatta acctgggcgt ggtggcaagg cgcctgtggt
                                                                     1200
cccagctact cgggaggctg aggcaggaga atagtgtgaa cccaggaggc ggagcttgca
                                                                     1260
gtgagccaag atagtgccac tgcacttcag cctgggtgac agatgtgaga ctctgtctca
                                                                     1320
                                                                     1329
aaaaaaaa
```

```
<210> 5460
<211> 1916
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1917)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1614)...(1414)
<223> similar to gi4490420 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5460
ttttttttt ttgagcagga getgggeett tgagggeece tgetecaace ccaagetgea
                                                                       60
tttatgaaat aacccatcac aggtggattt taaaaatacc caaaaaaaat atttaatata
                                                                      120
cattataaaa cctagggggg gtttggaggg ggcctgagcg atatgcaaac agggaggacc
                                                                      180
ttcaggaaag ctcgggccag ggtcggggat gaggaaggga aggggcacag tacttcatat
                                                                      240
gaaactcata aatacccaca ggtggctgct ggacaggccc agctggctct gggggcctgg
                                                                      300
gtgttaagaa gggacagcag gtgaagggtt aaccttcagt ccccagaaac tgggtctggg
                                                                      360
agctgctact ctaggcaggt agattgaggt ggggaagaac ctaagggagc agtgcccac
                                                                      420
caagggtttg tcagattcaa gcctcaggca agagaaaaat caaaagcctt ctgctactct
                                                                      480
ctedetetgg geetetggte tgeecagagg etgggaetec tteetetace ttgeteteaa
                                                                      540
totggagggt gotgggggt gocccatctt cotggggccc otggctggct tgtgggctaa
                                                                      600
tgaggtgcta atggggtcta gtagctgctg tgctcccttc ttcatgccca gtctgaaaca
                                                                      660
ggtgetecce taacceageg eceetegatg aggetecact ecacactgea gagtetetec
                                                                      720
cctaccctgc ggccagcccc cgccccaggg aggtagtata aacctgggct ctggggacaa
                                                                      780
gcagccctgg atgagaactc cagctctgcc cacctctcct gtgggtccct caacttcctg
                                                                      840
gagcctgggc acttcatctg aaacccagag acctacgctg ctgtgcggag tctgaggacc
                                                                      900
acacaagcca tgcaaggagt ctgggcacca ggcctgggac acaaangggg caaggaagtg
                                                                      960
tgggcccete tgtcctcagt ccaaccccaa ccggacacte ccagggccte tgctcactga
                                                                     1020
ctcccttggt ctccatcctg ccctcacctg cccatcatgc tcccccaagg gtgggtgggg
                                                                     1080
gtacagtgge cacacatget ggäggetgaa ggtgteecet atececaeet etetgaggte
                                                                     1140
acgcgagget gggcagagca gggtgatggt gggtcagcgc cccggacagg ctgcccacc
                                                                     1200
gttgagccct cctctcctct cttctcccac aattaaagcg cagaacagtg gcagggagtg
                                                                     1260
tgtgtgctgg ggtaggtggg gaggcctcct gggtcctggg cctgaggcct ggcaggtaga
                                                                     1320
tgaateetea ateetggaee eeeceagggg tgeeaggeag gtgtggagag gagatgetea
                                                                     1380
```

```
1440
ccctqcatcc ttaaqqaqqc gcagagggca ccctagtctt tgacgagctt gtagacatgg
tgctgggccc cgtgctcact ggtggagact tcgaagacaa aagcaatgac aagcagggtc
                                                                    1500
teetgggagt eeeggetegt gaccacetge aggatggtga agtteteeag caegetgtte
                                                                    1560
atcatgtact tetegggeag gtgetteage ttgtggatga agttgateat gtaaggagte
                                                                    1620
                                                                    1680
tgggcaccag gcctgggaca caaaggggca aggaagtgtg ggcccctctg tcctcagtcc
aaccccgacc ggacactecc agggeetetg etcactgact ceettggtet ceatcetgee
ctcacctgcc catcatgctc ccccaagggt gggtgggggt acagtggcca cacatgctgg
                                                                    1800
aggetgaagg tgteceetat ceccacetet etgaggteac gegaggetgg geagageagg
                                                                    1860
gtgatggtgg gtcagegece eggacagget geetegtgee gaatteetge agageg
                                                                    1916
```

```
<210> 5461
<211> 414
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (53)...(128)
<223> similar to gi1763291 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5461

cccgcctgca ggaattcggc acgagccaaa actgaacttc taaaataact aggaaggact 60
cgagaaacta catgatatga taattaaaag gagaaaaatg ttgcggcaac agaaaaagaa 120
gagatgaatg gcagtacctt ttatattggt gtggaatagg ttttcctggg tctgatttct 180
gacaagctga agagtgtcta cagcctggtt tgcctgtctg ccctcatgga tgctattaaa 240
gctttgtttt gttgaacagt cagataccca actctgttgc cttgtggaag atgagtcaat 300
gcaatgcttc ttaaagtggt ctcttctccc tgacccacaa atcttttggt actaccattt 360
tgggaagtca aaaaaggcta gtaattgacc agaaaacaat tttgtggaaa tttg
```

```
<400> 5462
atcctgcttt cagagaactt aaggaaagat gtagaagctg taactggcag teetgctagt 60
```

```
cagacateca titgtatigg aattitacti agaagtgcag aactggctct titgctccat
                                                                      120
ccagtggatc aagcaaatac tcttaagtct cctgtttctg aaagtgtgag cccagtggta
                                                                      180
cctgattatt tgcctacaga aaatggggat tttttgtctt caaaaagaaa acaaattagt
                                                                      240
agggatataa atagaattaq aagtgtaact gttaatcata tgtcagacaa cagatctatg
                                                                      300
agtgttgacc ttagccatat ccctttaaag gatcctttgc tttttaaatc agctagtgat
                                                                      360
acaaatctgc aaaaaggcat ttcttttatg gactatttat cagataaaca tttagggaaa
                                                                      420
ataagtgaag atgaaagtag tggacttgtt tacaaaagtg gctcaggaga aattggatca
                                                                      480
gaaacaagtg acaaaaagga ttcattttat acagattcaa gtagtgtctt aaactacaga
                                                                      540
gaagattega atataettte atttgatagt gatggtaate aaaacataet tteaagtaet
                                                                      600
ttaactagta aaggaaatga aaccatagag tccatcttta aagctgaaga tttgcttcca
                                                                      660
gaagcagett cactetetga aaacetggat atcagtaaag aagagaceee eecagttaga
                                                                      720
acacttaaat cacagtcatc tttaagtgga aagcctaagg aacgttgccc acccaacctg
                                                                      780
gctcctctct gtgtttctta taagaatatg aaaagaagct cttcacaaat gtcattggat
                                                                      840
accatttcac ttgacagcat gatattggaa gaacagttat tagaaagtga tggaagtgat
                                                                      900
agccatatgt ttttggaaaa aggaaataaa aagaactcaa ctacaaatta caggggcaca
                                                                      960
gcagaaagtg tgaatgctgg tgcaaaccta cagaattatg gtgaaacttc tccagatgcc
                                                                     1020
                                                                     1080
atcagtacaa attcagaggg tgctcaggaa aatcatgatg acctgatgtc cgttgtggta
tttaaaatta ctggtgttaa tggggaaatt gacatccgag gggaagatac agaaatctgt
                                                                     1140
cttcaagtga accaggtgac accagaccaa ttaggcaata tcagccttcg gcattacctt
                                                                     1200
tgtaatcgtc cagttggttc cgatcagaaa gctgtaattc attccaaatc ctctcctgag
                                                                     1260
atttetetga gatttgaaag tgggeetggt getgtaatae actetttaet tgeagaaaaa
                                                                     1320
aatggattte tgeagtgeea catagaaaac tteageactg agtttettae atettetett
                                                                     1380
atgaatattc aacatttttt ggaagatgaa actgttgcaa cagtaatgcc aatgaagata
                                                                     1440
caagtttcta acacgaaaat aaatttaaaa gatgatagtc cccggagtag tacagtatcc
                                                                     1500
cttgaaccag ctcctgtaac tgtacatatt gatcatcttg tggtagagag aagtgacgat
                                                                     1560
ggctcttttc atatcagaga ttctcacatg cttaacactg gaaatgattt gaaagaaaat
                                                                     1620
gtcaaaagcg attcagtgct gctgaccagt ggaaagtatg atctgaagaa acaacgcagt
                                                                     1680
gtcacgcaag ccactcagac aagcccaggg gttccttggc cttctcagtc agctaacttt
                                                                     1740
cctgagttct cctttgactt cactagggaa cagctcatgg aagagaatga atctcttaaa
                                                                     1800
caggaactgg ctaaagctaa aatggctctt gcagaggctc acttggaaaa agatgctctt
                                                                     1860
cttcatcata taaagaagat gacagttgaa tagcaggagt ggcagtcaaa actgaaatta
                                                                     1920
tagctctggg agtaggaagg ttatatttat aatgtggatg ttaccagtta ggggaagact
                                                                     1980
tttättttca tgaaaagaca ataaaacaaa atggaatgtg atgaagtggt gactatttca
                                                                     2040
aagccagttt agaaagtatt agtacgggca ttacaatctt ttggttgttt tgtgttttgg
                                                                     2100
ggcttaaccc tcttttaagc tgttgtgatc ctagggaagt caacacatag tgtaaaataa
                                                                     2160
ttaccatgcc ctaatgaaaa gaagatgtca tttcctaatt ttgatatctc attttcggca
                                                                     2220
ttttttaaaa tgtaaaagga aaacctcttg tgttcacaca gattgctgaa ttgatttctc
                                                                     2280
catatttgtt aataatttac tattatttac aaagattcaa atgcttttat gactaatgta
                                                                     2340
aaatgaaaag aggcttacat tttaaatgtt attaaaatta tgtacttaaa tctataatta
                                                                     2400
tttaattatt gtaaaaagtc caagcagatc aataaactat ataattaatg ggtttggaaa
                                                                     2460
atcatcaccc tactgaactt acaaaatatc ttgaaaatgt gaaaaatatc attttaaata
                                                                     2520
atgggtacat tgtataagtg gaagctataa ttttcaacaa aaagatggta caaatgtaaa
                                                                     2580
agtaaaaagc acaaactata caaaagcaaa atctatggcc aagtgattta aaagcattac
                                                                     2640
ttgtacattc ctttaaacat ttgttgttag aagcaaaaga gtaatttatc ctgctaaatt
                                                                     2700
tggcaccatt tgtaattata aaaattttga ttaatactat ttatattaat ttctttacct
                                                                     2760
tcattttttc tccttaagga gttgattgtt tttggaaatg ttttttcct tgcacataag
                                                                     2820
acagtttcat accattctta tagaatcata ttaggtgggt gtttgcacat actaaattta
                                                                     2880
taaagctagt tttgattaaa gctctatgtg agatatatat acatacacaa gtcttctata
                                                                     2940
ataagagtcg ttggtgaatt ttgaattcta ttttgttagg aattaaggtt gaaatcaaca
                                                                     3000
tgaaagaatc tcaatcatgc attataaaat aaaagtacat gggtgttaag aaacaagaga
                                                                     3060
cttttaaaga tttaaaaatat atttctgata gaatttaact aagtggtgtg tattttaaaa
                                                                     3120
ttcacattct taaacataaa tctatccaag atagaaaatg aaatagctgg actactcttt
                                                                     3180
ctttaagata cttgaaaatt ttaaaccaca ttgcaacact ttatggtgct ttgcgtgttt
                                                                    3240
ggcatgacat acacagtggt cctggtatat aagtgcttgg gggaaaatac atattttgtt
                                                                     3300
tacattaaat titgaagtga titaggetti attgaaaaca atactggeet teeeteeet
                                                                     3360
tetetaaeat eeatttteat ttaegttatt taaaatatae aggeaetgtt ttgggtaeag
                                                                     3420
aggatatagc caagagcaaa ttgatagtag tttacctcag agtattaaaa aaatcataat
                                                                     3480
```

```
aaqtcatqtt aatctaaaac tatataatag ccttagatta aatgtgcaga tqtctaatta
                                                                     3540
aagatttaaa atgtatageg tatgteetta gaacatttga tttttaggta tacattegge
                                                                     3600
aaaaacagtc tgttatggaa aagaaggatt gatgggacat taacttcttc cgagctaaca
                                                                     3660
ttgtttctga agattgacct attctatata aatttaaatt tttctatgtt tttcttttt
                                                                     3720
tttttgcgat gaggtttcgc tcttgttgcc caggctggag tacaaggggg ggatcttagc
teacegeaac eteegeeteg ggggtteaaa tgatteteet gteteageet eetgagtaac
                                                                     3840
tggggttaca agcgcccacc attacgccca gctaattttt ggtatttttg gtagacacag
                                                                     3900
ggtttcacca tgttggccag gctggtcttc aactcctgac cccaggtgat ccgcccacct
                                                                     3960
cagectecca aggtgetggg attgcaggeg tgagecaceg tacceggeet etategtata
                                                                     4020
ttataattgc ttattgttat agaagctgaa tgttttactt actactttta aatttatttg
                                                                     4080
gtottoccaa ggaaatoata caaacggtag agattatgat aatotgagca ttotgtgtgo
                                                                     4140
ttagtttgat ttttttattt ataagcagta ctatttttat agatgtttaa aattcataaa
                                                                     4200
acactgtatt ctgagaggta ggtattattc aaatgttaga aatttttttt aaaaaaatgc
                                                                     4260
cctqaqqctt aqaaaqqaca aatqactqaa atcacaatta qtaatctqqt ctttaqactt
                                                                     4320
aaageetagt tatatgettt tattataget tagteattaa tteacacatt tteeettate
                                                                     4380
ttttttatct tttaaaggtg accataaaac tttaaattgt gtgtgtacgt ctatgtatga
                                                                     4440
ggtatatgtt accetgtttg tgttattcaa actacetaaa agataggatg atttttgttt
                                                                     4500
aagtgaatcc caaactagca gtctqagaaa tacaggaaag cctgataatt qacttaccaq
                                                                     4560
agttggcttt ttttttttaa gttaccataa tttagatata aagttgtcat gtcctggaat
                                                                     4620
ttaaaaaaga aatctctagc tgagagatgt taatggtcag gagttgaaaa tgacaattgt
                                                                     4680
getttgettt ttatttttat titttgitta ettitgagit tittggagit tittteetat
                                                                     4740
atttttaatt gagaagtaaa aattatatat ttatggtgta caacacgatg tgatacatgt
                                                                     4800
atacettgtg gaatggetaa ateaagetgt etaacatgtt aceteacaaa etttttttgt
                                                                     4860
agegagaaca cttaaaattt tgtaacaatt ttcaagtata cagcatattg ttattaactg
                                                                     4920
taatcacgtg atatacagta gatctcttga acttatattt actaactgca atttcgtgtc
                                                                     4980
cttttacaaa catctcccca tttccccatc ccccagcctc tgataaccag aattttactc
                                                                     5040
tecateceat gaagttgact ttttttgeae teegtaagtg agateateta gaattttgge
                                                                     5100
atgtetttet gtgeetgget tattteaett aacacagtgg teceetgtgt agetgggaee
                                                                     5160
acaggegtgt gecactacae ceaggtttat ceatgttgte agaaatgaca ggattteett
                                                                     5220
tttttaaaag ttgaatggta ttctcttatg tatattttcc acatttgctt tttccattca
                                                                     5280
tecattgatg gacagttaaa ttgattecat atettggeta ttgagtaatg etgeagtgaa
catgggattg cagatatete ttecacatae tgatttegtt teetttgaac atataccaaa
                                                                     5400
tagtgggatt ggtggataat atggtagttc tattttttaa tgttttgaqq accctccata
                                                                     5460
ctgttttcca taatggctat aataatttac attgccacca acaqtqtaca aaqcttttct
                                                                     5520
ttccttttct ctgcatcctc tccaacactt cccttttgtc ttcttgataa tagtcattct
                                                                     5580
aacgggtatg attacagtag ctttgtagtg ggttttctgt gctgtgcttt ttaatttcat
                                                                     5640
gtatgtaaaa aacattgggt attttgaatg tttttctttt ctcaccttat cctagaactt
                                                                     5700
gaggetggge geggtggete atceetgtag teteageact ttgggaggee aaattgggea
                                                                     5760
gatcacttga ggtcaggagt tcgagaccag cctggccaac atggtgaaac cccatttcta
                                                                     5820
ctaaaaatac aaaaattagc caggcgtggt ggtgcacgcc tgtagtccca gccaatcagt
                                                                     5880
aggctgaggc acgagaatcg cttgaaccca ggaggccaag gctgcagtga gccacgattg
                                                                     5940
caccactgca ctctaacctg agcaacacag actccatctc
                                                                     5980
```

```
<210> 5463
<211> 533
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(98)
<223> similar to gi976252 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5463
ttggattaaa caaccattta ttatggggca aactgcaagc aagcactttg aacacatgga
                                                                       60
ttttttggaa gaaaggtgac aagaaaatca gagaaaacat cattgcattt ttagggggaa
                                                                      120
aactacaaat ttctaattta gctgcagaaa aaataattag agaacacaaa taaaatgtac
                                                                      180
tagtgaatac atgcttctct agacccaaac aaaaactatt tgcaacgtaa ttaaaacagg
                                                                      240
ttaagtgctg tgaaaaatag aaacatggtg acatagaaga gcctgacggg ggaacctaac
                                                                      300
cgagtcctga gagtgtaagc cagcttcccc aaggaagtga cacttcaacc gagatctgaa
                                                                      360
ggacagcagt ctataaatga agtagagaaa ggcagtgctg agggcagagg gcacctgcat
                                                                      420
gggcagaggc tgggagcaag atgagtacag cgtgccccaa gtaatcagga agtgccagtg
                                                                      480
gctggagtgc agagacagca gcgcagtttt agctagagat gagagtaagg gag
                                                                      533
```

```
<210> 5464
<211> 1882
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1883)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (7)...(1298)
<223> similar to gi4581082 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5464 ggacttegge acgaggteac actgegggtg ctcctcaaag acgegetget ggageetgge 60 geeggggtge tgteeateta etacetgggg aagaagttee tgggegaeet geageeagae 120 ggaaggatca tgtggcagga gaccgggcag accttcaact cacccagcgc ctgggccacc 180 cactgcaaga agetggtgaa ccctgccaag aagtcgggct gtggctgggc ctctgtcaag 240 tacaaaggcc agaaactgga caagtacaag gccacctggc tccggctgca ccagctgcac 300 acgcctgcca cggctgctga tgagagccca gccagtgaag gggaggagga ggagttgctg 360 atggaagagg aggaggagga cgttctggcg ggggtctcag cagaggacaa gagtcggaga 420 ccactgggga agagccette agagcetgee cacceggagg ccacaaceee agggaagegg 480 gtggacagca agatccgggt tccggtccgc tactgcatgc tgggcagccg cgacttggcc 540 aggaaccccc acaccctggt ggaagtaaca teetttgeag ccatcaacaa gttecagccg 600 ttcaacgtgg ctgtttctag caacgtgctg ttcctgctgg acttccacag tcacctgaca 660 cggagtgagg tcgtgggtta cctggggggc cgctgggacg tcaacagcca gatgctgacg 720 gtgctcagag cettecettg teggageegg eteggggaeg caaagaetge agetgeeate 780 gaagaggaga tetaccagag cetgtteetg eggggeetgt eeetggtggg etggtaceae 840 agccacceae acagecegge getgecatet etgeaggaea tegaegeaea gatggaetae 900 cagctgcggc tgcagggctc cagcaatggc ttccagccct gcctcgccct gctctgctcc 960 cottactatt otggeaacce aggeocogag tocaagatet egeotttetg ggtgatgeet 1020 cetecegage aaaggeeeag tgaetatgge ateceeatgg atgtggagat ggeetaegte 1080

```
caggacaget teetgaceaa tgacateett caegagatga tgetgetggt ggagttetae
                                                                     1140
aagggtteee etgacetegt gaggeteeag gaaceetgga gecaggagea cacetacete
                                                                     1200
gacaagetta agateteett qqccageagg aegeccaagg aecagageet gtgteaegte
                                                                     1260
ctggaacagg tgtgcggcgt cctcaagcag gggagctgag ccttccaggg cagggtgggc
                                                                     1320
tocagttgto ttgagggtoc ggatgggoto aagttotgga gggggtoaat gaagttotgo
                                                                     1380
ttgacctcga tgtccaggga gtccttcacc tctgccaggc gcttcatgga ctcgccggca
                                                                     1440
tccagcaatg cgtcacctgt ggagaagtgg tgggggaagc catcataccg ggcctgggac
                                                                     1500
cactagactg agacactect cageetttgt ttttgaaata gegtttcaca ggetggaacg
                                                                     1560
                                                                     1620
cagtggcgct gtaccagctc actgcaggcc tcaaactggg ctcaagccat gctggcacct
                                                                     1680
cageeteeca agtageeggg accaeaggeg tteaceecea cacetggate etttecaaet
                                                                     1740
tetttgagat gaagtetege tgttgeecag getgeagtge agtggeatga teteagetea
                                                                     1800
ctgcaacctc tgcctcccag gttcaagcaa ttctcctgtc tcagcctcct gagtaagggg
                                                                     1860
gattacaggg gcctgccacc acatccagct aatttttgta tttttaatag agacgggttt
                                                                     1882
caccatatag accnacaaaa aa
```

```
<210> 5465
<211> 2567
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(1474)
<223> similar to gi3874391 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5465
atcgttacga tatcattacg ccaagcttgg cacgaggcaa agtgacaaat ggcctacagc
                                                                       60
tgtgagagca aatggacatc tcctcctgaa ctctgagaag atgtcaaaat ccacaggcaa
                                                                      120
ettecteact ttgacceaag ctattgacaa attttcagca gatggaatge gtttggetet
                                                                      180
ggctgatgct ggtgacactg tagaagatgc caactttgtg gaagccatgg cagatgcagg
                                                                      240
tattctccgt ctgtacacct gggtagagtg ggtgaaagaa atggttgcca actgggacag
                                                                      300
cctaagaagt ggtcctgcca gcactttcaa tgatagagtt tttgccagtg aattgaatgc
                                                                      360
                                                                      420
aggaattata aaaacagatc aaaactatga aaagatgatg tttaaagaag ctttgaaaac
agggtttttt gagtttcagg ccgcaaaaga taagtaccgt gaattggctg tggaagggat
                                                                      480
gcacagagaa cttgtgttcc ggtttattga agttcagaca cttctcctcg ctccattctg
                                                                      540
tecacatttg tgtgageaca tetggacaet cetgggaaag cetgaeteaa ttatgaatge
                                                                      600
ttcatggcct gtggcaggtc ctgttaatga agttttaata cactcctcac agtatcttat
                                                                      660
ggaagtaaca catgacctta gactacgact caagaactat atgatgccag ctaaagggaa
                                                                      720
gaagactgac aaacaacccc tgcagaagcc ctcacattgc accatctatg tggcaaagaa
                                                                      780
ctatccacct tggcaacata ccaccctgtc tgttctacgt aaacactttg aggccaataa
                                                                      840
cggaaaactg cctgacaaca aagtcattgc tagtgaacta ggcagtatgc cagaactgaa
                                                                      900
gaaatacatg aagaaagtca tgccatttgt tgccatgatt aaggaaaatc tggagaagat
                                                                      960
ggggcctcgt attctggatt tgcaattaga atttgatgaa aaggctgtgc ttatggagaa
                                                                     1020
tatagtetat etgaetaatt egettgaget agaacacata gaagteaagt ttgeeteega
                                                                     1080
agcagaagat aaaatcaggg aagactgctg teetgggaaa ecaettaatg tttttagaat
                                                                     1140
agaacctggt gtgtccgttt ctctggtgaa tccccagcca tccaatggcc acttctcaac
                                                                     1200
caaaattgaa atcaagcaag, gagataactg tgattccata atcaggcqtt taatgaaaat
                                                                     1260
gaatcgagga attaaagacc tttccaaagt gaaactgatg agatttgatg atccactgtt
                                                                     1320
ggggcctcga cgagttcctg tcctgggaaa ggagtacacc gagaagaccc ccatttctga
                                                                     1380
```